

**CITY OF CHULA VISTA  
MUNICIPAL ENERGY UTILITY  
FEASIBILITY ANALYSIS**



**EXECUTIVE SUMMARY**



**Submitted Jointly by:**

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## I. PURPOSE OF THE FEASIBILITY ANALYSIS

### EXECUTIVE SUMMARY

#### I. PURPOSE OF THE FEASIBILITY ANALYSIS

On May 29, 2001, the City passed Resolution No. 2001-162 adopting the City's Energy Strategy and Action Plan (City Energy Strategy). The City Energy Strategy was based on the assessment of the City's energy management options that were set forth in a Report prepared by MRW Associates. On June 5, 2001, the City adopted Ordinance No. 2835 establishing the City as a municipal utility. An overview of the City's Energy Strategy and other actions taken by the City to implement its Energy Strategy are discussed in detail in the Introduction (Section I) of this feasibility analysis (Report).

Based upon the impact of the California energy crisis, and in furtherance of the City's Energy Strategy, the City of Chula Vista (City) retained the services of Duncan, Weinberg, Genzer & Pembroke, P.C., McCarthy & Berlin, L.L.P., and Navigant Consulting Inc., collectively the "Municipal Energy Utility (MEU) Study Team," to perform a *Municipal Energy Utility Feasibility Analysis* for the City. The City requested that the MEU Study Team perform a financial, legal, and technical feasibility analysis of developing a municipal energy business.

Specifically, the MEU Study Team was directed to determine: (1) whether it is desirable and economically feasible for the City to pursue the implementation of an MEU; and (2) if so, to advise what form of MEU structure would best meet the needs of the City.

The City further asked the MEU Study Team to analyze and discuss the feasibility of developing a municipal energy business that would meet as many of the following objectives as possible:

- (a) establish reliable electricity and natural gas supply at competitive rates and maintain the highest level of customer service;
- (b) identify a viable business model that benefits the City's time and investment;
- (c) pursue an environmental advantage for City residents, businesses and the region;
- (d) obtain a citywide distribution of MEU benefits;
- (e) utilize the MEU as an economic development tool to retain and attract businesses; and
- (f) enhance Chula Vista's vision to continue as a vibrant community in the region.

## I. PURPOSE OF THE FEASIBILITY ANALYSIS

In this feasibility analysis, the MEU Study Team has provided comprehensive answers to the questions posed by the City based upon the objectives set forth by the City, important assumptions, and the analysis of a wealth of available data.



## II. EXISTING UTILITY FRANCHISE WITH SAN DIEGO GAS & ELECTRIC COMPANY

### II. EXISTING UTILITY FRANCHISE WITH SAN DIEGO GAS & ELECTRIC COMPANY

San Diego Gas & Electric Company (SDG&E) owns and operates both the electric and gas distribution systems in the City of Chula Vista under franchises granted by the Chula Vista City Council. The original twenty-five year franchise, granted in 1972 to operate the electric distribution systems in Chula Vista, expired in 1997 and was extended for a five-year period under Ordinance No. 2746, adopted in 1998. The original franchise to operate a gas distribution system in Chula Vista, also with a twenty-five year term, expired in 1997 and was extended for a five year period pursuant to Ordinance No. 2747, adopted in 1998. Both the electric and gas franchises expired, by their terms, on June 30, 2003.

Representatives of Chula Vista and SDG&E conducted negotiations with respect to the renewal or extension of the electric and gas franchises earlier this year. The terms of the proposals submitted by SDG&E for a fifty-five (55) year extension of the franchises were evaluated by the Chula Vista staff and rejected as unacceptable. Once negotiations reached an impasse in late July 2003, the City and SDG&E attempted to agree on a temporary extension of the franchises to give the City more time to evaluate its options. The City offered a 90-day extension of the franchise agreements while SDG&E offered to extend service under current terms and conditions for a 45-day period. At this writing, the term of the franchises has not been agreed upon and the parties have continued to perform under the terms and conditions of current franchise agreements on a month-to-month basis.

The current franchise agreements have been an important element in the conduct of this feasibility analysis inasmuch as the terms, conditions and rates for gas and electric service as provided in the current franchises, or rate schedules promulgated thereunder, have provided the benchmark against which all of the MEU options have been measured to determine the feasibility of each of the MEU options analyzed by the MEU Study Team. In evaluating each of the MEU alternatives, the impact on franchise fee revenue received by the City under the current franchise agreements has been calculated and explicitly set forth as a cost of pursuing each MEU option. The MEU Study Team's test for economic feasibility of any and all MEU options requires that financial benefits of a particular option must exceed any foregone franchise fee revenue that would result from the pursuit of the MEU option.

### III. REGULATORY AND LEGISLATIVE ISSUES

#### **III. REGULATORY AND LEGISLATIVE ISSUES**

As part of this feasibility analysis, the City has directed that the MEU Study Team provide an explanation of the legal and regulatory environment in which the MEU would operate. The MEU Study Team has prepared a comprehensive analysis of the state and federal laws, which are, or may be, applicable to any of the MEU options identified and analyzed. The Regulatory and Legislative issues which the City will face if it implements any of the MEU options are set forth in Appendix B.I of the Report at 11-27.

## IV. OVERVIEW OF RECOMMENDATIONS

### A. Options

In preparing this Report, the MEU Study Team performed a thorough analysis of the energy markets in California and, in particular, in the SDG&E service territory and prepared a comparative analysis of the City's opportunities and options to develop and implement the City's Energy Strategy and Action Plan. Following the directives of the City's Council and Staff, the MEU Study Team developed a series of conclusions and recommendations, which are summarized below. The MEU Study Team has examined both the markets for electricity and gas and determined the feasibility of developing a Municipal Energy Utility which would provide both electric and gas service.

For the reasons set forth in this Report and summarized below, the MEU Study Team concluded that it is feasible for the City to develop and implement a municipal electric utility on a phased basis. At the same time, however, the MEU Study Team has concluded that, barring any substantial changes in SDG&E's gas rates, it is not economically feasible for the City to undertake providing gas service to consumers within the City within the study period. The options examined by the MEU Study Team are discussed in Section III and evaluated in Section IV of the Report. The conclusions and recommendations relative to these options are set forth below.

Based on its analysis, the MEU Study Team recommends that the City embark on a course of action that includes the following elements:

- (a) development of a Community Choice Aggregation (CCA) Program with plans to become operational in 2006, including active participation in ongoing CPUC proceeding's to develop implementation costs, credits, rules and protocols.<sup>1</sup> A final decision whether to implement the CCA program should be made following final CPUC rulings on these issues;
- (b) immediate development and implementation of City ownership of a distribution system in the currently undeveloped portions of the City (Greenfield Development);
- (c) combine the CCA and Greenfield projects for administration by the City's MEU;
- (d) on a longer term basis, begin development of an electricity Generation Supply Strategy which will include the ownership or

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<sup>1</sup> The MEU Study Team recommends that the City continue its current participation in CPUC and related regulatory proceedings in an attempt to affect the outcome of any CPUC decision that will directly affect CCA cost-effectiveness and feasibility.

#### IV. OVERVIEW OF RECOMMENDATIONS

otherwise gain entitlement to at least 130 MW of electric generation capacity inside the City to optimize the benefits from the recommended programs;

- (e) on an interim basis, develop commitments for power purchase agreements to meet the immediate requirements of the CCA and Greenfield projects;
- (f) After several (three to four at a minimum) years of successful CCA/Greenfield experience, consider acquiring ownership and operation of the existing electric distribution system within the City which is now owned and operated by SDG&E, and becoming a full service municipal electric distribution utility (MDU);<sup>2</sup> and
- (g) barring any substantial change in SDG&E/SoCal Gas rates or in the natural gas markets in California, the MEU Study Team recommends that the City of Chula Vista not pursue providing natural gas service to customers within the City. If an MDU is established in the future, the City should reevaluate the potential for providing natural gas at that time.

#### **B. Savings**

With a focus on the options enumerated above, and using conservative assumptions, the MEU Study Team modeled potential savings for the City, measured against current and projected SDG&E rates, yielding a net present value (NPV) of between \$21 and \$122 million for the study period. These projected savings or benefits will be available, at the City's discretion, to reduce utility rates to electric customers of the City, to fund utility operations and expansion projects, or to fund other worthy public purpose projects.

In preparing the financial pro forma for each study option, the MEU Study Team performed a thorough analysis including: (1) SDG&E's forecast rates; (2) potential California Energy Crisis Cost Responsibility Surcharges (exit fees) lost franchise revenues, and lost property tax revenue; (3) energy or commodity costs (including generation ownership, power purchase contracts, renewable energy contracts and spot-market purchases); (4) California Independent System Operator (CAISO) charges; and (5) operation and maintenance costs. Each of these items was factored into the pro forma analysis. In this evaluation, the MEU Study Team assessed the cost and benefits of each option based on two energy supply strategies. Under the first strategy, the City would procure all of its energy requirements in the wholesale energy market by executing power contracts with various power suppliers at fixed prices for medium and

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<sup>2</sup> In the event that the CPUC's final rules and regulations fail to provide the foundation for an economically sound CCA project, the MEU Study Team recommends that the City accelerate consideration of the MDU option.

#### IV. OVERVIEW OF RECOMMENDATIONS

short terms (Contracts Supply Strategy). In the second strategy, it was assumed that the City would install its own generating facilities or take an ownership position in a power generation facility developed by another entity (Generation Supply Strategy). The Generation Supply Strategy is based upon City ownership of 130 MW of new combined cycle gas turbine power plant capacity. The financial pro forma analysis compares the total costs of each option with the total costs of continuing to take retail utility service from SDG&E. The start-up costs and capital costs identified for each MEU option are amortized over thirty years and factored into the pro forma analyses to arrive at the figure for cost savings in relation to SDG&E rates. Thus, the projected savings or benefits shown are net of the amortized start-up costs.

Financial pro forma for all the study options or combinations are summarized in the table below. The table shows the total savings over the 18-year study period from 2006 through 2023 and the Net Present Value (NPV) of these savings over the same time period.

##### **Summary of Savings Estimated For Each Option Ranked By NPV of Savings From 2006 Through 2023**

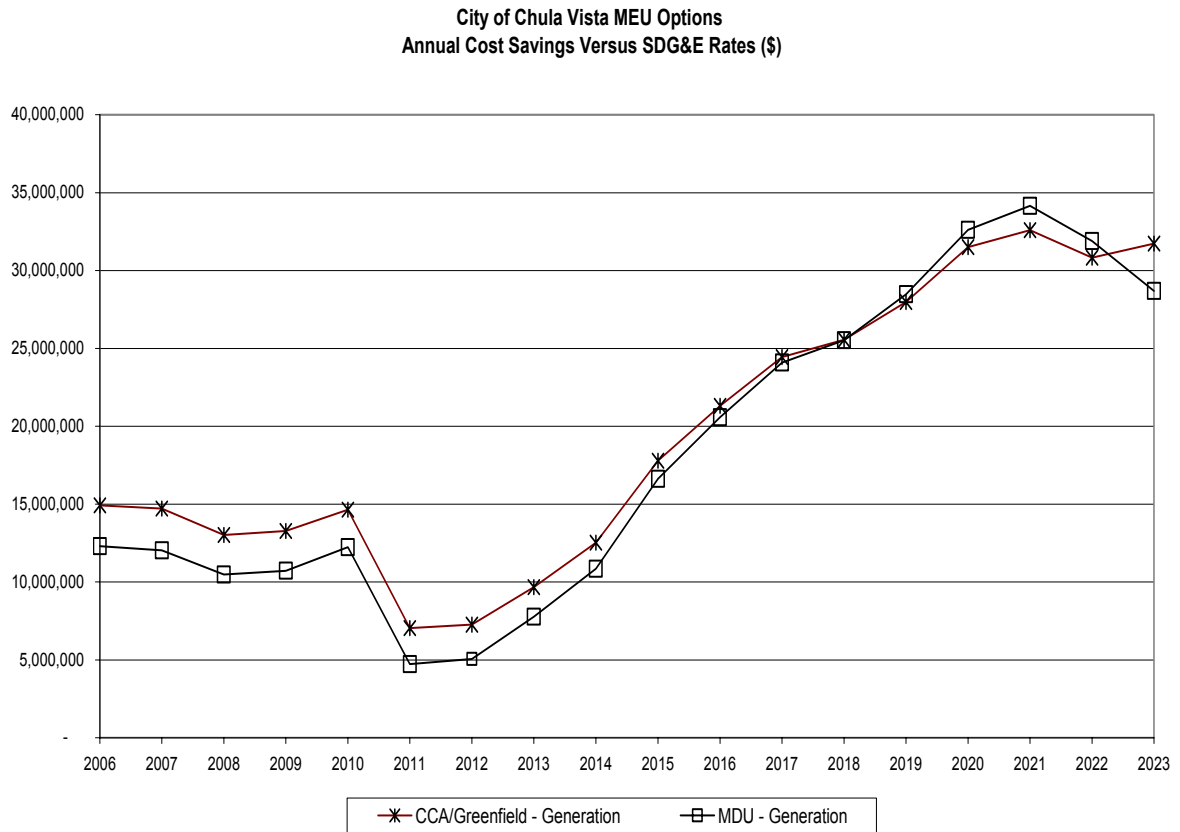
Rank	Option	Supply Strategy	Nominal Savings (\$ Millions)	NPV of Savings (\$ Millions)	Average Annual Savings (%)
1	CCA/Greenfield	Generation	351	122	10%
2	MDU	Generation	329	109	9%
3	CCA	Generation	244	90	8%
4	CCA/Greenfield	Contracts	170	52	4%
5	CCA	Contracts	86	28	2%
6	Greenfield	Contracts	89	21	10%
7	MDU	Contracts	16	(12)	-1%

The above table considers the dollar cost and benefit of each of the MEU options. Later in this Report, the MEU Study Team discusses the non-quantifiable risks and benefits of each of the MEU options.

As shown on the chart below, the implementation of a Combined CCA/Greenfield option, with a Generation Supply Strategy,<sup>3</sup> will produce the maximum savings for the City of approximately \$14.9 million in 2006, increasing to \$31.7 million in 2023. The total NPV of the stream of annual savings is \$122 million for the study period. The chart shows further that the implementation of the second ranking option (in terms of maximum savings), an MDU option, with Generation Supply Strategy, will produce savings of \$12.3 million in 2006, increasing to \$28.7 million in 2023. The total NPV of the stream of annual savings is \$109 million for the study period.

<sup>3</sup> Elements of the Generation Supply Strategy are discussed in Section V.C below at 11-13.

#### IV. OVERVIEW OF RECOMMENDATIONS



Each of the MEU options, which were evaluated by the MEU Study Team, is summarized in Section VI below, at 15-46, and detailed analysis of each option is provided in Sections III and IV of the Report.

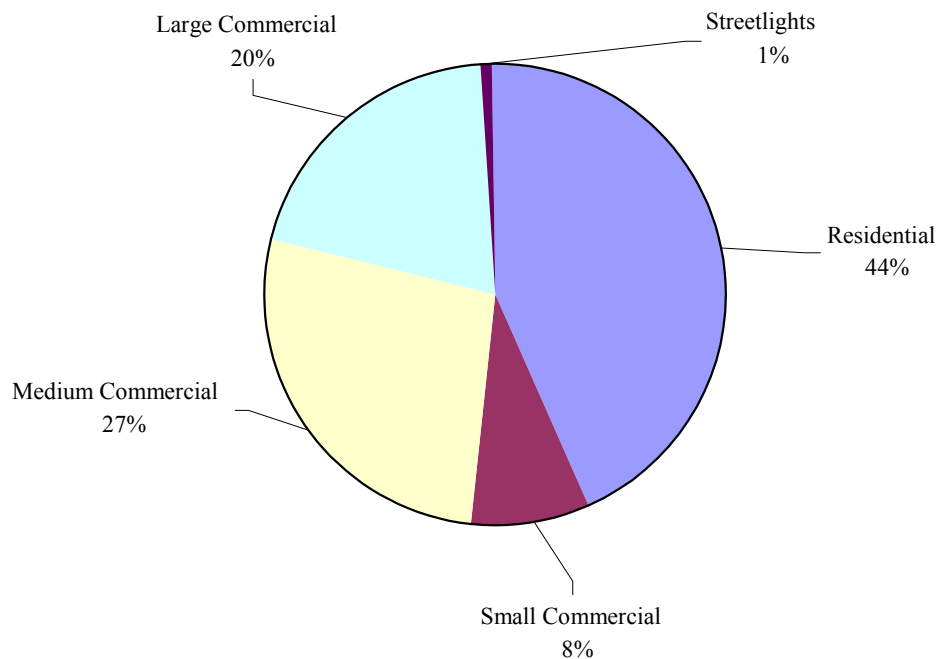
## V. CITY ENERGY CUSTOMERS, PROJECTED LOAD AND POWER SUPPLY

### V. CITY ENERGY CUSTOMERS, PROJECTED LOAD AND POWER SUPPLY

#### A. Summary

The chart below shows the City electric energy loads by customer sector for 2002, that are consistent with the SDG&E system-wide average energy mix.

### 2002 Chula Vista Energy Use



However, the City is experiencing significant development in ways that will change this energy mix. Based on the City's general plan, growth is projected to occur in all customer segments, but especially in the medium commercial customer sector. Such growth, when it occurs, will improve the City's load profile, reduce the average costs to serve the City's electric loads, and improve the City's attractiveness to energy suppliers. The following table compares 2002 segment usage for the City and SDG&E<sup>4</sup> contrasted with forecast sector usage for Chula Vista in 2023.

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<sup>4</sup> SDG&E 2002 FERC Form-1, page 301, line 2, column d, system wide results.

## V. CITY ENERGY CUSTOMERS, PROJECTED LOAD AND POWER SUPPLY

### City Versus Regional Energy Usage

	(MWh)					
	Chula Vista 2002		SDG&E 2002		Chula Vista 2023	
<b>Residential</b>	305,735	44%	6,266,000	44%	568,772	42%
<b>Small Commercial</b>	56,216	8%	1,710,025	12%	78,154	6%
<b>Medium Commercial</b>	193,534	27%	3,391,622	24%	439,170	33%
<b>Large Commercial</b>	142,922	20%	2,725,159	19%	250,191	19%
<b>Streetlights</b>	6,627	0.9%	44,442	0.3%	8,745	0.7%
<b>Total</b>	705,034	100%	14,137,248	100%	1,345,032	100%

The City has been, and will continue to be, subject to strong growth in all sectors. However redevelopment and new development are forecast to have the greatest impact in the medium sized commercial end-use consumer sector. In the next twenty years the City will experience growth in its overall energy requirements by more than 90 percent. As described in Section IV.F.3.d(1) of the Report at 120-21, a municipal distribution utility, comprised of the number of the City of Chula Vista electricity consumers projected for 2006 (recommended MEU implementation date), would be the 11<sup>th</sup> largest out of California's 48 electric utilities based on customer count, and the 20<sup>th</sup> largest based on energy sales.

#### **B. Customer Base**

The MEU Study Team estimates that, in 2004, the City will have approximately 73,000 electric service customers (excluding the City's street lighting service accounts). The City's annual load factor (the ratio of peak annual demand to the average annual demand) is approximately 65 percent, which is high compared to other California cities. The City's higher load factor would allow the MEU to function more efficiently and economically compared to the majority of other California cities.

Residential electric load can be significantly affected by ambient temperatures and consumer use of air conditioning. However, Chula Vista's relatively mild climate and reduced cooling load has a significant impact on residential load shapes and a direct bearing on the cost to serve the City's electric load. Generally, Chula Vista's residential loads are more economic to serve than other typical California communities, more attractive to generation suppliers, and render more types of generation projects cost-effective.

Long-term electric load forecasts for the City have been modeled for two primary areas: (i) existing and planned development in areas currently served by SDG&E's distribution infrastructure; and (ii) areas being developed in which SDG&E



## V. CITY ENERGY CUSTOMERS, PROJECTED LOAD AND POWER SUPPLY

has not built distribution infrastructure and where the City may decide to build and operate distribution infrastructure (Greenfield development).

The MEU Study Team forecasts that, over the study period, there will be an increase of approximately 22,000 customers, including growth in the current SDG&E service territory and in the Greenfield areas, with an annual consumption growth of approximately 600,000 MWh, and a peak load growth of approximately 100 MW. This represents a customer increase of 29 percent and an energy increase of over 80 percent. More than half of the increased regional energy consumption results from planned commercial development. Due to this trend, the average, per customer energy consumption increases by more than 36 percent (excludes street lighting accounts) during the study period.

### Projected Chula Vista Customer Load

	Customers			Energy (MWh)		
	2004	2023	(%)	2004	2023	(%)
Residential	69,440	89,510	29%	329,719	568,772	73%
Commercial <20 kW	3,203	4,272	33%	57,594	78,154	36%
Commercial 20-500 kW	340	708	108%	198,276	439,170	121%
Commercial 500 kW +	13	22	71%	146,424	250,191	71%
Total	72,996	94,513	29%	732,013	1,336,287	83%

### C. Power Supply

In providing electric power to serve the City's customer base under any of the study options, the City has two basic choices: purchasing its electric power supply requirements from other utilities or generators participating in the California energy market (Contract Supply Strategy); or developing generation resources by constructing generation or participating with a generation developer and taking an equity interest in local generation (Generation Supply Strategy).

A key finding of this feasibility analysis, under any of the MEU structures analyzed, is that there is significant benefit to the City in electric generation ownership or ownership-like rights. Furthermore, the City finds itself in unique circumstances compared to other cities in the region due to the confluence of natural gas and electric transmission facilities, and the location of the South Bay Power Plant (South Bay), and the location of the proposed Otay Mesa Power Plant (Otay Mesa). The City is geographically at the center of a significant portion of the energy facilities required to support the San Diego region. The MEU Study Team recommends the City develop in-City generation as the centerpiece of its MEU electric supply strategy. Our recommendation is not that the City should seek to develop a generation resource on its own; rather the MEU Study Team recommends that the City look to jointly develop and/or pursue a partial ownership with a developer in a larger base load generating unit.

## V. CITY ENERGY CUSTOMERS, PROJECTED LOAD AND POWER SUPPLY

### 1. In-City Generation

The Generation Supply Strategy, with in-City generation, provides the maximum opportunity for electricity cost savings achieved through the implementation of an MEU. Associated savings are positive in every year for both the CCA and MDU options. The combined CCA/Greenfield option with a Generation Supply Strategy offers the greatest benefits of all the options.

Ownership of generation would offer the City several advantages relative to procuring electricity through power purchase contracts (Contracts Supply Strategy). Among the benefits associated with participation in generation projects are:

- Lower electricity costs due to the City's retention of generation operating margins;
- The ability to leverage partial ownership to locate projects within the City and receive franchise fee revenues and local taxes; and
- Reduction in CAISO transmission charges, CAISO administrative charges, and protection against charges related to transmission system congestion.

The MEU Study Team modeled generation options for the City using operating and cost parameters of a new combined cycle gas turbine operating as a base load plant. These parameters include the unit's heat rate, capacity cost, variable O&M costs, availability factor, hours of planned operation, and the year the resource becomes operational. Sales of any excess production beyond what is needed to serve the City's load would be sold into the market. The price for excess sales reflects a 25% discount relative to the prevailing peak or off-peak price to reflect the probability that excess sales will occur in the lowest priced hours of the on- or off-peak periods.

The following assumptions were used in the calculation of generation costs:

Capacity:	130 MW
Technology:	Combined Cycle Natural Gas Turbine
Year Online:	2006
Heat Rate:	7,000 BTU/KWh
Capacity Factor:	90%
Variable O&M:	\$2 Per MWh
Excess Sales:	75% of Market Price

There are presently at least two local generation options, which may be available to the City with respect to obtaining generation located within or near the City's boundaries:

(1) *Otay Mesa*: The Otay Mesa Generating Project (Otay Mesa) will be a 510 MW, natural gas-fired combined cycle power plant located in the Otay Mesa area in western San Diego County. Calpine Energy Services, LP (Calpine) is the project

## V. CITY ENERGY CUSTOMERS, PROJECTED LOAD AND POWER SUPPLY

owner. The 15-acre site is about 15 miles southeast of San Diego, California, and about 1.5 miles north of the United States/Mexico border. SDG&E has recently announced plans to purchase most or all of the capacity from Calpine's Otay Mesa plant. If these plans are implemented, this option would not be available to the City. If SDG&E's proposal is not finally approved and implemented, the City should examine this option, as the MEU Study Team believes that there is still an opportunity to discuss potential teaming arrangements with Calpine.

Under current plans, a new 230-kV switchyard at the site is proposed. There are plans to build a 0.1-mile connection to SDG&E's existing 230-kV Miguel-Tijuana transmission line that passes near the eastern boundary of the Otay Mesa site. A new two-mile natural gas pipeline will be built by SDG&E to provide fuel for the project. Originally scheduled for completion in the summer of 2002, the construction schedule now calls for its completion by summer 2005. Currently the project is reported to be five percent complete.

(2) *South Bay Power Plant Repower (SBPP)*: The California State Lands Commission approved the San Diego Unified Port District's (Port District or Port) expenditure of \$110 million in public trust funds to acquire the SBPP from SDG&E on January 29, 1999. The existing SBPP consists of four natural gas-fired conventional boiler units and one 14 MW combustion turbine.

Duke Energy North America's (Duke) 10-year lease with the Port District to operate the SBPP went into effect in April 1999. As part of its lease agreement with the Port District, Duke must, subject to certain conditions, dismantle and relocate the existing plant by 2009. According to the lease agreement, Duke must identify a specific relocation site no later than June 2006 and publicize its site selection as part of an application to the California Energy Commission (CEC) for permits to site the new plant.

Currently, the future of Calpine's Otay Mesa project and the siting of a new South Bay Power Plant remain unknown. The MEU Study Team's analysis indicates that the City is uniquely located to allow the City to potentially host either or both of these generation projects.

### **2. Distributed Generation**

In addition to the evaluation of the Generation Supply Strategy, the MEU Study Team also evaluated the feasibility of acquiring or building small distributed generation units within the City to serve the customers of the City's MEU as a start-up strategy. With respect to this option, the MEU Study Team has concluded that there are no generation projects of sufficient size now operating within the City to support the development of an MEU. The MEU Study Team has also concluded that the development of small distributed generation projects is not economically feasible as a start-up measure in implementing an MEU.

## V. CITY ENERGY CUSTOMERS, PROJECTED LOAD AND POWER SUPPLY

Moreover, until the City successfully develops its Greenfield projects or forms an MDU and acquires the electric distribution system of SDG&E, it would have no means of delivering power from small City generation facilities to consumer electric loads (load). Without a distribution system, it would not be possible for the City to obtain delivery of power under the state's direct access laws and regulations and the Federal open access laws and regulations which apply to direct transmission access, except for the CCA-only option. Furthermore, the concept of developing distributed generation at selected sites around the City (e.g., main campus) would not provide a City-wide benefit and would offer limited savings. As noted above (see Section I.(d)), the MEU Study Team was asked by the City to analyze feasible municipal energy businesses with the objective of "city wide distribution of MEU benefits."

At such time as the City develops a Generation Supply Strategy and has, through ownership or construction, a means of delivering power from local distributed generation projects to load, the MEU Study Team recommends that the City explore the development of local distributed generation projects to augment the City's power supply.

## **VI. MEU STRUCTURAL OPTIONS – OVERVIEW AND EVALUATION**

The MEU Study Team has examined all MEU structures, which are presently authorized under California law (or the California Constitution) and has identified five structures that would be suitable and provide a legal basis for Chula Vista’s entry into the utility business. These include:

- a) Community choice aggregation for both electricity and natural gas (CCA);
- b) “Greenfield municipalization” development (Greenfield);
- c) Municipalization under a city electric utility department format, eventually leading to a Municipal Distribution Utility (MDU) system;
- d) Participation in a joint powers agency (JPA); and
- e) Municipalization under a Municipal Utility District format (MUD).

Each of these options is discussed in Section III of the Report and evaluated in Section IV of the Report.

### **A. Community Choice Aggregation (CCA)**

#### **1. Summary**

As discussed in the Report, Section III B.1 at 25 and Section IV.C at 39, the City of Chula Vista can elect to serve as a community load aggregator for electric service within the City. A load aggregator is an entity that procures electric energy and/or natural gas for residents and businesses within a community. Under this option, the City would not own the electric or gas distribution system within the City. Rather, it would own or procure electric power and/or natural gas, either through ownership of resources, market purchases, or through a partner on behalf of the customers that choose to aggregate their load. SDG&E would then be required to deliver the electric energy and/or natural gas to the end-use customer across its transmission and distribution facilities.

#### **2. Customer Base**

The customer base for the electric CCA option is potentially all electric customers in the City. However, customers have the option to “opt-out” of the CCA program and continue to receive their electric service from SDG&E. For the purposes of this feasibility analysis, the MEU Study Team has assumed that all potential customers within the City would participate and that none would elect to “opt out.” To the extent that some potential customers do “opt out” of the CCA program, the benefits to remaining customers would be proportionately diminished. The customer base for the gas aggregation option includes all residential and small commercial customers in the City. Certain industrial customers that use less than 250,000 therms per year can also become a part of the customer base.

### **3. Functional Elements**

The MEU Study Team evaluated two primary supply strategies for the City to serve the electric loads of the MEU customers: 1) a Generation Supply Strategy that uses city owned generation resources for base load requirements; and 2) a Contracts Supply Strategy that uses long term power purchase contracts for base load requirements. The Generation Supply Strategy is based on City ownership of 130 MW of new combined cycle gas turbine power plant capacity located within the City or by acquiring an equity interest or entitlement to 130 MW of a plant owned by a third party. The Contracts Supply Strategy is based on the City entering into long and short-term fixed price power supply contracts to meet the majority of the MEU's load requirements.

The MEU Study Team evaluated a number of supply portfolios to optimally serve the load requirements of the City. A typical supply portfolio would utilize generation owned by the City or long-term contracts for the majority of projected base load requirements. These long-term resources would be supplemented with short-term contracts covering the additional seasonal load requirements of the portfolio, typically in the third quarter of each year. Spot market purchases and sales are used to fill the residual net short load requirements.

The City would not need to invest in any transmission or distribution infrastructure, *i.e.*, substations, lines or meters, in order to serve City residents under this option. Although final CCA Rules and Regulations have not been promulgated, it is assumed that the City's CCA customers would pay SDG&E the retail rate for non-generation charges (e.g., transmission and distribution). SDG&E would provide a credit on the bill to remove its costs related to generation and procurement of electricity that would be procured by the City. The bill credit that SDG&E will provide for generation-related charges is assumed to be the entire generation rate net of the applicable exit fees. SDG&E would continue to perform metering and billing services for end use customers, the costs of which are embedded in existing retail distribution rates.

### **4. Benefits and Risks**

#### **a. Benefits**

The 18-year NPV of savings or benefits to the City and its residents, measured against current and projected SDG&E rates, is projected to be \$28 million if power supply is obtained from the competitive wholesale market in the form of contracts or an average annual savings of 2%. If the power is supplied from City-owned generation, the 18-year savings are projected to be \$90 million with average annual savings or benefits of 8%. Capital costs for the Generation Supply Strategy are estimated to be \$78 million.

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The major benefit available through the electric aggregation option is that the City could begin procuring electric energy and supplying it to retail customers without the need to purchase the SDG&E electric distribution system.

By electing to implement a CCA program, Chula Vista could begin to provide utility services to customers within the City as an interim step without developing a utility infrastructure that would require the enormous investment necessary to acquire and operate a utility distribution system.

### **b. Risks**

On the electric utility side, CCA is governed by the Community Choice Aggregation legislation (AB 117, Chapter 838, September 24, 2002<sup>5</sup>), and the CPUC's corresponding proceeding, Rulemaking 03-10-003 (R.03-10-003). If the City elects to pursue the CCA option, the CPUC must confirm or approve the implementation plan before final steps to implementation can occur. Pursuant to R.03-10-003, the CPUC is to determine the implementation requirements for a CCA, including the level of any applicable cost responsibility surcharges, IOU administrative charges, and other costs and restrictions that may be developed. As discussed further in Section 5 below at 18-19 and in Section IV.D.4 of the Report at 57, the parameters of the CPUC's proceeding will dictate the rules governing CCA programs. On November 26, 2003, the assigned Administrative Law Judge in R.03-10-003 issued a ruling bifurcating the proceeding into two phases. The first phase, in which hearings were held in February 2004, addressed many of the cost related issues. Administrative and ministerial matters will be the subject of the second phase of the proceeding.

The MEU Study Team is advised that the City is a party to R.03-10-003 and is taking an active role to ensure that the CPUC's CCA rules and regulations are just and reasonable and consistent with the City's energy development objectives. The MEU Study Team recommends that the City continue to take an active interest in ongoing CPUC proceedings to establish the costs, credit rules and protocols that will eventually determine the cost effectiveness and feasibility of the CCA program.

The primary risks inherent in the CCA option are:

- The cost responsibility surcharges and transaction fees imposed by the CPUC could make the program uneconomical. Especially problematic would be unanticipated increases in these costs after the CCA program has begun. Such cost increases could impose financial hardship on the City or force CCA rates higher than the comparable SDG&E rates.

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<sup>5</sup> AB 117 became effective January 1, 2003 amends Sections 218.3, 366, 394, and 394.25 of the Public Utilities Code and adds Sections 331.1, 366.2, and 381.1 to the same Code.

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OVERVIEW AND EVALUATION  
CCA

- The City could improperly hedge its exposure to electricity and/or natural gas price volatility and adverse price movements could impose severe financial hardship on the City or its customers.
- The City could fail to properly secure its customer base, making debt financing via the capital markets impossible to obtain and exposing the City to stranded costs if customers opt out of the CCA program.
- The City's energy suppliers could default on supply contracts (credit risk) at times when energy spot markets are high, forcing the City to purchase energy at excessively high prices.

On the natural gas side, the biggest impediment to a successful implementation would appear to be the slim margins on the actual procurement of the natural gas commodity. Typically, existing natural gas Local Distribution Companies (LDCs) earn most of their return from their transmission and distribution assets, not the actual commodity itself, which is usually priced at cost with a minor markup for brokerage services. As discussed in Section VII below at 47-48 and in Section IV.H of the Report at 140-54, the MEU Study Team has made an analysis of the feasibility of providing gas service to customers within the City and has concluded that it is not economically feasible to attempt to provide gas as an aggregator or provide gas transmission and distribution service by acquiring the gas distribution system of SDG&E. This option should be revisited if there are dramatic changes in SDG&E's gas rates.

**5. Legal/Regulatory**

**a. Electric Aggregation**

While AB 117 does provide a statutory basis for Community Aggregation Projects, the CPUC has not yet developed and implemented final rules for the development of such programs. On September 4, 2003, the CPUC issued an order instituting a rulemaking or "OIR" (Rulemaking 03-09-007) in order to develop the guidelines for community aggregation programs, as it was directed to do under AB 117. On October 2, 2003, the CPUC reissued the rulemaking under Docket No. R.03-10-003, and an initial pre-hearing conference and a workshop have been held. The City, as noted above, is a party to and active in, these proceedings.

The City could become a Community Choice Aggregator for electric utility generation by developing an implementation plan, and then having this plan approved by the CPUC pursuant to the rules and protocols to be adopted in R.03-10-003. AB 117 (2002 Migden – Chapter 838, Statutes of 2002) offers flexibility in that it provides for an "opt out" program rather than an "opt in" program. This would allow the City to sign up customers willing to switch from SDG&E generation service to City service without the necessity of developing an active marketing effort to lure customers. Instead, the City would merely need to notify customers of the impending community



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choice aggregation program. Any customers that do not want to participate in the program would be required to notify the City of their election within a specified amount of time.

AB 117 also requires full cooperation by the host investor owned utility (SDG&E) in any CCA program implemented by the City. In this regard, SDG&E is required to provide necessary load information and other important data to Chula Vista, and continue to provide transmission, distribution, metering, meter reading, billing and other essential customer services.

An additional benefit of becoming a Community Choice Aggregator may be for Chula Vista to administer the public goods charges collected from electric customers in the program. In addition to authorizing CCA programs, AB 117 also requires the CPUC to determine the policies and procedures by which any party, including a CCA, may apply to the CPUC to administer cost-effective energy efficiency and conservation programs. The Commission issued a decision in July 2003 to set up this program. Like all other electric users in the state, those that are served by a CCA will still be required to pay the state mandated public goods charge. However, in lieu of having these funds administered by SDG&E for use on any qualified programs within the IOU's entire service area, Chula Vista could apply to the CPUC for the authority to administer these funds and utilize 100% of the proceeds locally. Decision 03-07-034 (D.03-07-034) authorizes CCAs seeking energy efficiency program funding authorization to do so, applying the existing procedures, schedules, selection criteria, and evaluation, measurement and verification requirements already developed by the CPUC. Furthermore, in order to facilitate the CCA's ability to administer the energy efficiency program funds, D.03-07-034 directs the IOUs to provide certain information and data to the CCAs that would allow them to develop and implement local energy resource plans and programs.

### **b. Gas Aggregation**

For natural gas load aggregation, the State of California currently has laws and procedures in place for "core" aggregation opportunities. Core aggregation has been allowed since the early 1990's and permits a municipal agency to petition the current natural gas energy provider and take over responsibility for the provision of natural gas commodity services. This is known as the Core Aggregation Transportation (CAT) program, and requires a minimum usage by customers that together purchase and consume 120,000 therms of natural gas per year. Core customers are those that use less than 250,000 therms a year and include all residential customers as well as those small commercial and industrial customers using under the core limit threshold. Non-core customers (large commercial and industrial customers using over 250,000 therms per year) are already required to solicit their own natural gas procurement. As discussed in Section VII below at 47-48 and in Section IV.H of the Report at 140-54, the MEU Study Team has determined that it is not economically feasible for the City to enter into the gas distribution business, including engaging in gas load aggregation, at this time. This

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option should be reevaluated in the event that SDG&E succeeds in raising its rates for gas service.

### **6. Financing Options**

The City would have a variety of financing mechanisms available to finance its CCA project depending upon the specific asset and/or activity. Financing techniques might include the following:

- General Obligation Bonds
- Limited Obligation Bonds
- Special Assessment
- Certificates of Participation
- Revenue Bonds
- Commercial Paper

The MEU Study Team believes that tax-exempt debt financing should generally be applicable to finance CCA capital projects.

In Appendix C, Section IV.A, at 126-27, the MEU Study Team has provided an overview and comparative analysis of each type of financing vehicle that is available to the City.

### **7. Implementation Schedule and Timelines**

It is estimated that it would take between one and two years for full implementation of this option, depending largely upon when the rules and regulations for the program are approved and implemented by the CPUC. The major and critical steps necessary to implement a CCA program are set forth below:

#### **a. Implementation Schedule**

The MEU Study Team recommends a two-track approach to implement a CCA project. The following outlines the critical path elements for each track of work:

#### **(1) Track 1 Tasks**

1.1 - Project Initiation - Orientation Sessions for Elected Officials and Staff

1.2 - Base Case Feasibility Studies

- Load Forecasts
- Cost-of-Service Analyses

1.3 - Regulatory Engagement-A

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Participation in CPUC CCA proceedings and workshops for the development of costs, credit rules and protocols; use base case feasibility studies performed under 1.2 above as the basis to demonstrate the impacts of proposed decisions.

### 1.4 - Track 1 Report

Update base case feasibility study with final CPUC adopted costs, credit rules and protocols; evaluate results and make threshold decision whether or not to proceed with implementation.

### 1.5 - Prepare CPUC Implementation Plan Filing

- Develop program structure, organization, operations plans and funding
- Perform Rate Design (cost allocation methodology and disclosure)
- Document participant rights and responsibilities
- Finalize energy supply resource portfolio
- Adopt Implementation Plan in a public hearing<sup>6</sup>
- Pass City Ordinance to implement CCA as defined in the Implementation Plan<sup>7</sup>
- File the Implementation Plan with the CPUC

Where third-party suppliers are indicated, evaluate and document their financial, technical and operational capabilities. If the City intends to pursue an equity position in generation resources document the same capabilities of the City and/or its equity partners.

### 1.6 - Regulatory Engagement-B

Monitor, participate and respond as required to CPUC proceedings and processes to approve or reject the City's filed Implementation Plan. Pending CPUC approvals, begin Track 2 Tasks.

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<sup>6</sup> Cal. Pub. Util. Code §366.2 (c)(3) "The implementation plan, and any subsequent changes to it, shall be considered and adopted at a duly noticed public hearing."

<sup>7</sup> Cal. Pub. Util. Code §366.2 (c)(10)(A).

**(2) Track 2 Tasks**

**2.1 - CCA Implementation**

- 2.1.1. - Register the CCA with the CPUC (may become part of 1.5 above)
- 2.1.2. - Execute Investor-Owned Utility (IOU) Service Agreement <sup>8</sup>
- 2.1.3. – Determine Required Aggregated Load Metering Facilities <sup>9</sup>
- 2.1.4. - Complete Arrangements for 60-Day Customer Notification  
And Opt-Out Provisions
- 2.1.5. - Notify SDG&E When CCA Service Will Begin

**2.2 - CCA Operation (iterative and on-going activities)**

- 2.2.1. - Activate Energy Supply Resource Plan
  - Execute Supply Contracts
  - Schedule Generation Resources
- 2.2.2. - Update Load Forecast and Optimize Scheduling
- 2.2.3. - Manage Supply Portfolio and Risk Management
- 2.2.4. - Process Financial Settlements
- 2.2.5. - Produce Operating Statements and Reports

**b. Timelines**

Upon acceptance of this Report, the City will have completed Track 1 Tasks 1.1 and 1.2. The CPUC proceedings began on August 21, 2003 and appear to be moving ahead in a manner to meet the CPUC's expectation of lasting between six and nine months or approximately mid-2004. The MEU Study Team strongly recommends that the City remain active in the ongoing CPUC proceedings in order to help shape the

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<sup>8</sup> The City, as a CCA operator, will need to establish a legal relationship with SDG&E. It is anticipated that a service agreement will include processes for information exchange including electronic data interchange, procedures for settling financial transactions, treatment of customer bill payment funds transfer, credit terms, access to confidential customer information, audit provisions, and regulatory oversight and complaint processes.

<sup>9</sup> Identify whether additional metering devices described in Section IV.C.2.a of the Report at 40 can be employed. If feasible and warranted, place service orders with SDG&E to have them installed.

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CCA implementation costs, credit rules and protocols. The MEU Study Team estimates that a CCA could be operational by 2006. Please refer to Section VIII.B at 55 and Appendix C, Section V at 130, for Gantt Chart time requirement projections for each Task described above.

**8. Recommendation**

The MEU Study Team recommends that, subject to the final adoption of CPUC rules, the City take immediate steps to provide electric utility services through the development and implementation of a CCA program. To enhance the benefits accruing from the CCA program, the MEU Study Team recommends that the City also adopt a Generation Strategy leading to the development of generation capability within the City as part of its resource portfolio. The MEU Study Team does not recommend any financial commitment by the City for the development or ownership of a generation resource until such time as the CPUC has finalized CCA rules and protocols and approved a CCA Implementation Plan for the City. However, planning should begin immediately for the implementation of a CCA program, although actual implementation must await the promulgation of final rules by the CPUC.

## **B. Greenfield Development**

### **1. Summary**

As discussed in the Report, Section III.B.2 at 26 and Section IV.D, at 61, Greenfield development calls for the investment in distribution facilities to provide electric service to certain previously undeveloped areas within the City of Chula Vista. This structure would include undeveloped acreage of land designated for an industrial park, for example, or for new residential subdivisions that are anticipated and planned for within the City's general plan build-out schedule. The City may need to purchase a substation and would have to interconnect to SDG&E's system in order to supply energy. The City would also need to develop the distribution system configuration (overhead/underground), lines, poles, and service extensions, as well as make arrangements for appropriate meters and related customer service functions. The MEU Study Team has identified the Otay Ranch Area, Mid-Bayfront, and Sunbow planning areas as the sites primarily adaptable to a Greenfield project.

Once the Greenfield utility structure is established, the City would take wholesale transmission service from SDG&E and the CAISO, and its customers in the Greenfield areas would no longer pay SDG&E retail rates. As the Greenfield development would interconnect to SDG&E's distribution system, transmission service would be under SDG&E's Wholesale Distribution Access Tariff (WDAT). The rates, terms and conditions of service to be provided by SDG&E under its WDAT are regulated and determined by the Federal Energy Regulatory Commission (FERC).<sup>10</sup> The cost for taking wholesale service under the WDAT would be determined based on an assessment of the actual distribution facilities utilized by the City. The distribution capital costs associated with City-owned distribution system serving the Greenfield development will be determined based on the cost to construct new facilities.

### **2. Customer Base**

The most likely areas for Greenfield development are the Mid-Bayfront, Otay Ranch, and Sunbow planning areas. The number of customers in these potential Greenfield development areas are projected at 4,017 in 2006 increasing to 10,193 in 2023.

### **3. Functional Elements**

A new, City-owned electric distribution system would be constructed in the Greenfield service areas and interconnected with the existing SDG&E system. The distribution system includes substations, lines, poles, extensions and meters.

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<sup>10</sup> A copy of SDG&E's Pro Forma WDAT is attached as Appendix D.

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The required capital investment for the new distribution system is approximately \$3,000 per customer. The approach used to estimate distribution capital costs is based on industry standard investment costs per utility customer. The derivation of this figure is explained in Appendix C, Section II.E.2 at 84-86. The MEU Study Team believes this is a reasonable approximation for distribution capital costs in the context of the MEU options analysis. Actual distribution capital costs will depend on factors specific to the topography of the city, such as population density; requirements for undergrounding of distribution facilities; the mix of residential, commercial, and industrial customers in the existing and Greenfield development areas; and the method of service provided for these customers. The option Chula Vista may elect is to require all developers of new Greenfield areas to construct the requisite distribution facilities according to the City and SDG&E standards, and dedicate such facilities to the City. If such an approach were successfully implemented, the benefits accruing from the Greenfield option would increase substantially from what the MEU Study Team has estimated, because the initial infrastructure costs would be borne by the developer, not by the City as was modeled by the MEU Study Team. The implementation of this option would, of course, be subject to the adoption of appropriate policies by the City Council to impose or recover these charges. The MEU Study Team has taken the most conservative approach to projecting financial benefits for the Greenfield development by incorporating the aforementioned \$3,000 per customer distribution cost.

Resource requirements for a Greenfield only approach would be fulfilled by entering into long and short-term contracts for power supply. The MEU Study Team has concluded that it would not be feasible to obtain an ownership interest in a generation project solely to match the relatively small and rapidly changing load requirements in the Greenfield development areas.

The power supply sources and portfolio would include long-term (one to five years) and short-term (up to one year) contracts. Spot purchases could also be used to fill the residual net short load requirements.

The rate structure assumptions used in the Greenfield model are based on the City taking wholesale transmission service from SDG&E through SDG&E's WDAT.

### **4. Benefits and Risks**

#### **a. Benefits**

The 18-year NPV of savings to City residents, with power supply obtained through contracts, is projected to be \$21 million with average annual savings of 10% compared to comparable SDG&E rates. Capital costs for this option are estimated at \$13.8 million.

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The benefits under this option include the likelihood of lower cost of procurement and delivery of electricity, local control, improved reliability, and economic development enhancements. An additional benefit of a Greenfield municipalization effort would be that the City would not need to purchase the existing distribution facilities from SDG&E, and go through a lengthy condemnation process.

### **b. Risks**

One of the risks that would play out, at least through the initial infrastructure development period, is the economic viability of the program. Since at least part of the infrastructure would need to be in place before customers began to consume the energy, there would need to be enough working capital and cash flow to get through the first few years as development came “on-line.” Construction of some distribution facilities such as lines, poles, and extensions would be phased in as development progresses. However, some facilities may need to be constructed first, such as a substation with a large enough capacity to meet future load growth. Another risk is attributable to the fact that the amount of energy required to serve the Greenfield starts out very small. The City likely will not be able to secure power at as competitive rates as it could if it was purchasing for a larger load.

### **5. Legal/Regulatory**

With the exception of CPUC rules requiring the payment of Cost Responsibility Surcharges, or “exit fees,” discussed in Section IV.F.4.b.(4) of the Report at 124-26 and Appendix B, Section II.C.1 at 78-81, there are no specific state laws or CPUC rules regulating the implementation of the Greenfield development option. Chula Vista has adequate authority under the California Constitution and state statutes to provide electric service to its inhabitants. Federal law governs the interconnection of the City-owned distribution facilities with the facilities of SDG&E, including those operated by the CAISO and SDG&E’s rates for transmission service provided under its WDAT are regulated by the FERC. The laws regarding interconnection requirements are also addressed in Appendix B, Section II.C.3 at 33-35.

### **6. Financing Options**

The City would have a variety of financing mechanisms available to finance its Greenfield projects depending upon the specific asset to be required or built and/or activity. Financing techniques might include the following:

- General Obligation Bonds
- Limited Obligation Bonds
- Special Assessment
- Certificates of Participation



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- Revenue Bonds
- Commercial Paper

The MEU Study Team believes that tax-exempt financing should generally be applicable to finance all the Greenfield capital projects.

In Appendix C, Section IV.A, at 126-27, the MEU Study Team has provided an overview and comparative analysis of each type of financing vehicle that is available to the City.

### **7. Implementation Schedule and Timelines**

It is estimated that it would take one to three years for full implementation of this option. A detailed listing of the steps necessary to implement this option is set forth below.

#### **a. Implementation Schedule**

(1) Ordinance:

City passes an ordinance to form a municipal utility (City has already passed Ordinance No. 2835).

(2) System Design:

Electric distribution design firms will work with developers to design and specify system requirements in compliance with applicable design standards to serve the planned development. (2-3 mo.)

(3) Determine Interconnection Requirements:

Assess technical requirements and cost to achieve interconnection of the development distribution system with adjacent transmission or distribution facilities. If the given Greenfield development is going to be interconnected with facilities operating below transmission system voltage levels (which for SDG&E is 138kV), and served at distribution voltage levels (most likely 12-69 kV), it will need to be served under SDG&E's WDAT. If this is the case, the City must complete an application for service according to the SDG&E WDAT. SDG&E will perform a facilities requirement and system impact study to determine the logistics and the cost to effect an interconnection with the SDG&E system. A successful application will result in the execution of a service agreement

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which sets forth the costs, terms and conditions of service. (6-9 mo.)

(4) Final Evaluation:

Evaluate and assess projected loads, costs and benefits (at this point, primarily interconnection costs) and determine whether to proceed with the project. (1 mo.)

(5) Procure and Schedule Power:

Based on load studies and forecasts derived from information provided under item (2), tailor and initiate a resource and schedule power delivery to coincide with project completion and estimated development occupancy. Update power delivery schedules, as required before operational status as provided in power contract terms and conditions, to balance loads and resources. (2 mo.)

(6) Staffing/Outsourcing:

Initiate human resources plan. Update plans to reflect development schedules and requirements; perform staffing or solicit outsource staffing services. (2 mo.)

(7) Infrastructure Construction:

Land developer subcontractors will install electric system infrastructure, including trenching, conduit, backfill, vaults, manholes and transformer pads (as they would if SDG&E were to serve the area). (2-5 weeks)

(8) High Voltage Equipment Installation:

The City will engage subcontractors specializing in high-voltage interconnection to pull conductors through the conduit, install substations, connectors, switches, transformers and connections with metered panels (residents, businesses, etc). (2-3 weeks)

(9) Peripheral Equipment:

City will install peripheral electrical equipment (traffic controllers/irrigation pedestals/street lights). (2-3 weeks)

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### (10) Initiate Operations:

Schedule and initiate Greenfield utility operations to coincide with the occupancy date for newly developed area. (1 mo. - occupancy date)

#### **b. Timelines**

The MEU Study Team estimates that the steps identified above would take between 15 and 20 months to complete from the time electric distribution system design firms begin working with developers. Operation of a new Greenfield project will depend upon actual project completion and building occupancy in the newly developed area. The project implementation schedule Gantt chart, Section VIII.B below at 57 and Appendix C, Section II.V.B at 131, is structured in months from the onset of any given Greenfield development project.

### **8. Recommendation**

The MEU Study Team recommends that the City provide utility services to the residents and businesses in the developing areas of Mid-Bayfront, Otay Ranch, and Sunbow through the implementation of Greenfield projects and the construction of new, City-owned distribution facilities.

## VI. MEU STRUCTURAL OPTIONS – OVERVIEW AND EVALUATION COMBINED CCA/GREENFIELD DEVELOPMENT

### C. Combined Community Choice Aggregation/Greenfield Development

#### 1. Summary

The City of Chula Vista can simultaneously implement the CCA program and Greenfield development on approximately the same schedule. Based upon the economic analysis set forth in this Report, the MEU Study Team has concluded that the most beneficial option open to the City is a Combined CCA/Greenfield development based on a Generation Supply Strategy.

#### 2. Customer Base

In combining the CCA/Greenfield options, the City could serve a projected combined customer load of 90,652 customers beginning in 2006 and 104,469 customers in 2023 at the end of the study period. As discussed above, the MEU Study Team has assumed 100% participation in the CCA program. To the extent that potential customers “opt out”, as they have the legal right to do, the benefits to the City and its remaining customers would be reduced accordingly.

#### 3. Functional Elements

The functional elements of other CCA and Greenfield options discussed above do not change when the two options are combined. The two programs would be administered and managed by the same administrative staff.

#### 4. Benefits and Risks

##### a. Benefits

The benefits of a combined CCA/Greenfield development are materially enhanced by the combination of these programs. Based on the financial pro forma performed by the MEU Study Team, the combined CCA/Greenfield utility option, using City-owned generation (Generation Supply Strategy) would produce savings amounting to \$14.9 million in 2006 and increase to \$31.7 million in 2023, for a total NVP savings of \$122 million over the study period. Capital costs for this option are estimated to be \$78 million for generation and \$13.8 million for distribution facilities.

##### b. Risks

There are certain risks inherent in both the CCA and the Greenfield options, particularly one based on a Generation Supply Strategy. In the case of Greenfield development, the full implementation of a Greenfield program in the undeveloped areas of the City will depend on the pace at which commercial and residential development occurs in the Greenfield areas. There is also the risk that

## VI. MEU STRUCTURAL OPTIONS – OVERVIEW AND EVALUATION COMBINED CCA/GREENFIELD DEVELOPMENT

generation costs projected in the study to serve Greenfield's loads will be higher than projected due to unforeseen changes in the California energy markets.

In the case of CCA development, there is currently uncertainty and attendant risks related to the final development and implementation of rules and protocols governing CCA programs. The City also runs the risk that, if benefits or savings to be made available to electric customers are not attractive enough, prospective customers will "opt out" of the CCA program, thus diminishing the benefits or savings to the City's remaining customers.

### **5. Legal/Regulatory**

Pursuing a program which combines both Greenfield development and CCA will not alter the legal requirements for either option. There are no legal impediments (or advantages) to pursuing both options simultaneously or in tandem.

### **6. Financing Options**

The financing options open to the City for a combined CCA/Greenfields utility option are those applicable to either the CCA or the Greenfield options as discussed above.

### **7. Implementation Schedule and Timelines**

Barring any substantial delay in the promulgation and issuance of final CPUC rules and regulations for CCA Projects, it is estimated that a combined CCA/Greenfield utility option can be planned and implemented in a two to three year time frame to allow the City to commence operations in 2006.

#### **a. Implementation Schedule**

The major and critical steps to implement a CCA project are discussed above in Section VI.A.7.a at 20-22 and in Section IV.C.6.a of the Report at 58-60 and will not be repeated herein. The major and critical steps to implement a Greenfield project are discussed and outlined above in Section VI.B.7.a at 27-29 and in Section IV.D.6.a of the Report at 77-79 and will not be repeated herein. Suffice it to say that, in combining the Greenfield and CCA options, the critical steps and timing will remain relatively unchanged.

#### **b. Timelines**

The implementation schedules for the CCA and Greenfield MEU options can move forward simultaneously and the two options can be implemented on approximately the same schedule depending on separate variables.

## VI. MEU STRUCTURAL OPTIONS – OVERVIEW AND EVALUATION COMBINED CCA/GREENFIELD DEVELOPMENT

In the case of the CCA option, the largest unknown is the development and implementation of final CCA rules and regulations by the CPUC. As discussed earlier, the CPUC initiated its CCA rulemaking procedure on August 21, 2003 and issued Rulemaking No. R-03-09-007 on September 4, 2003. On October 2, 2003, the CPUC reissued the rulemaking under Docket No. R.03-10-003. On November 26, 2003, the assigned Administrative Law Judge in R.03-10-003 issued a ruling bifurcating the proceeding into two phases. The first phase, in which hearings were held in February 2004, addressed many of these cost related issues. Administrative and ministerial matters will be the subject of the second phase of the proceeding. It is anticipated that final CCA rules and regulations will be implemented by mid-2004, and, under this schedule, the MEU Study Team estimates that a CCA could be operational by mid-2005 (please refer to Section VIII.B below at 55 and Appendix C, Section V.A at 130 for Gantt chart time requirement projection for each critical path necessary to form a CCA).

In the case of a Greenfield Project, the operation of any Greenfield Project will depend upon actual project completion and building occupancy in the newly developed areas designated for Greenfield development. The MEU Study Team estimates that the steps necessary to implement a Greenfield Project would take from 15 to 20 months to complete from the time the City Staff and electric distribution design firm begin working with the developers of the Greenfield areas. The project implementation schedule (Gantt Chart) in Section VIII.B below at 57 and in Appendix C, Section IIV.B, at 131 is structured in months from the onset of any given Greenfield development project.

### **8. Recommendation**

The MEU Study Team recommends that the City elect to develop both a CCA project and Greenfield projects in the near term and combine the administration of these projects under the City's MEU. The MEU Study Team also recommends that the City immediately begin initial planning for development of an internal generation program to allow the City to serve its customers with City-owned generation. While it is not necessary for City-owned generation to be online to serve the MEU load at the outset, the long lead-time and due diligence required for investment in generation dictates beginning the process now. In developing an MEU with the CCA and Greenfield projects in the near term, the City will establish utility infrastructure and gain operating experience without the necessity of acquiring the electric distribution facilities of SDG&E.

## VI. MEU STRUCTURAL OPTIONS – OVERVIEW AND EVALUATION MUNICIPAL DISTRIBUTION UTILITY

### **D. Municipal Distribution Utility**

#### **1. Summary**

As discussed in the Report, Section III.B.4 at 26 and Section IV.F at 99, the Municipal Distribution Utility (MDU) model is a full service utility that develops and acquires generation resources and owns and operates the distribution facilities within the City in order to provide full utility service to retail electric customers in the City. If the City implements this option, the City would acquire SDG&E's electric distribution system by negotiation or condemnation and perform operation and maintenance activities. The City would also develop or acquire generation resources, and/or purchase power to meet City load requirements.

#### **2. Customer Base**

The development of an MDU will give the City the capability of providing full electric distribution service to all electric consumers in the City. It is projected that the MDU would serve 86,652 customers in 2006 and 104,499 customers at the end of the study period in 2023.

#### **3. Functional Elements**

The MEU Study Team evaluated two primary supply strategies for the City to serve the loads of the MDU customers: 1) a Generation Supply Strategy that uses city owned generation resources for base load requirements; and 2) a Contracts Supply Strategy that uses long term power purchase contracts for base load requirements. The Generation Supply Strategy is based on City ownership of 130 MW of new combined cycle gas turbine power plant capacity. The Contracts Supply Strategy is based on the City entering into long and short-term fixed price power supply contracts to meet the majority of the MDU's load requirements.

To achieve the highest benefit under this option, the City would have to acquire the distribution system of SDG&E and have ownership of at least 130 MW of internal generation. Under this scenario, the City would take wholesale transmission service from SDG&E and the CAISO, and its customers would no longer pay SDG&E retail rates. It is assumed that the City or its customers would be subject to payment for the exit fees and other non-bypassable charges mandated by AB 1890. The City would acquire the existing distribution system from SDG&E at a negotiated price or by the exercise of the power of eminent domain.

In assessing the feasibility of the MDU option, it is important to distinguish whether the option includes a Generation Supply Strategy based on the ownership or entitlement to at least 130 MW of load generation.

The MDU option is financially viable if the City owns generation within the City boundaries. Internal generation minimizes wholesale transmission charges and

## VI. MEU STRUCTURAL OPTIONS – OVERVIEW AND EVALUATION MUNICIPAL DISTRIBUTION UTILITY

other charges assessed by the CAISO. So long as the internal generator operates at a capacity factor greater than 50%, FERC rules require transmission access charges to be assessed on a net load basis, i.e., the internal generation is subtracted from the gross load requirements of the MDU before applying the transmission rates. In addition, internal generation reduces exposure to transmission congestion charges, charges for reliability services, and certain elements of the CAISO's grid management charge. The benefits of internal generation to the MDU's cost of service from reduced transmission access charges and other CAISO charges are estimated at \$6 million per year.

These wholesale transmission related benefits would not be obtained if the City were to supply its load through power purchase contracts or ownership of remote generation that must utilize the CAISO transmission network for delivery to the City MDU. An MDU supplied through purchases from the market (as opposed to City-owned generation) is not financially viable for the City in the near term.

The MEU Study Team evaluated a number of supply portfolios to optimally serve the load requirements of the City. A typical supply portfolio would utilize generation owned by the City or long-term contracts for the majority of projected base load requirements. These long-term resources would be supplemented with short-term contracts covering the additional seasonal load requirements of the portfolio, typically in the third quarter of each year. Spot market purchases and sales are used to fill the residual net short load requirements.

To import power, the City would take wholesale transmission service at the 115 KV voltage level and would be assessed CAISO charges for high and low voltage transmission service. Transmission costs are based on the currently effective CAISO transmission access charges applicable to the SDG&E area for high voltage and low voltage transmission service. The transmission charges were assumed to escalate at 1.3% per year.

The MEU Study Team used the results of a nationwide benchmarking study of municipal electric utilities to estimate distribution operation and maintenance (O&M) costs for the city. The study grouped municipal electric utilities by size into five strata and reports average per customer O&M costs within each strata for distribution O&M, customer service expenses, and administrative and general expenses. The average total annual distribution O&M costs reported by participants in the study range from \$246 to \$594 per customer, reflecting a wide range of urban and rural municipal utilities of various sizes and population densities.

The MEU Study Team has also used a targeted set of case studies of California municipal electric utilities to obtain O&M estimates that would be more reflective of the costs expected for the City municipal electric utility. Data are available for years 1998-2001, and the average total annual distribution O&M costs range from \$231 to \$380 per customer. For this analysis, the four-year average per customer O&M costs of California municipal utilities of similar size as Chula Vista was used to predict the cost for MDU distribution operations. The four municipal utilities with between



## VI. MEU STRUCTURAL OPTIONS – OVERVIEW AND EVALUATION MUNICIPAL DISTRIBUTION UTILITY

50,000 and 90,000 customers were selected. These were Burbank, Glendale, Pasadena, and the Turlock Irrigation District. The average annual O&M cost is \$270 per customer.

By comparison, the MEU Study Team has calculated the system-wide average distribution O&M costs for SDG&E, using FERC Form 1 data, of \$198 per customer. The lower figure for SDG&E reflects economies of scale in distribution operations that are not available to smaller distribution systems. The capital financing and tax advantages of municipal electric utilities are offset to a degree by higher per capita O&M costs typical of smaller utilities.

### 4. Benefits

The projected NPV of savings to City residents **does not** support use of this option with power procured solely through contracts. However, with power supplied from City-owned generation, the NPV of this option is projected to be \$109 million over the study period. Capital costs are estimated to be \$185 million to acquire SDG&E's distribution system and \$78 million for generation.<sup>11</sup>

If Chula Vista decides to pursue this option, its residents could realize a number of benefits, including the likelihood of lower-priced power, more stable electricity rates, local control, improved reliability, and opportunities for economic development. Moreover, in acquiring the SDG&E distribution system, the City will have valuable assets and broaden its opportunities for further savings.

There are important inherent benefits and advantages to public ownership of utility systems. Since the California electric industry was restructured and “deregulated” by the California Legislature in 1996, the electric customers of the State's IOUs have experienced dramatic increases in their electric rates, particularly in the San Diego area. At the same time, the customers of most of the State's publicly-owned utilities were protected from the dramatic increase in rates. While some municipal utility customers also experienced rate increases, the increases were not on the order of magnitude that the customers of the California IOUs have experienced. The major reason municipal utility rates did not increase as dramatically as IOU rates is that municipal utilities were not fully and forcefully committed to the California deregulation experiment, and therefore not substantially reliant on the energy spot markets in 2000 and 2001. Most municipal utilities had either developed their own generation resources, or entered into long-term power contracts that “locked-in” and stabilized future energy costs, and were therefore not dependent upon spot-market purchases. The history of the restructuring of the California electric industry and related regulatory and legislative issues is set forth in Appendix B, Section I at 11-27. This analysis demonstrates and discusses the legal and regulatory environment in which the City of Chula Vista's MDU would operate once established.

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<sup>11</sup> The total capital costs for the acquisition of SDG&E's distribution system would be approximately \$12 million lower if the City elects to pursue the Greenfield option and build distribution facilities for these customers.

## VI. MEU STRUCTURAL OPTIONS – OVERVIEW AND EVALUATION MUNICIPAL DISTRIBUTION UTILITY

Municipal utilities have an inherent price advantage over IOUs because the municipal utility is not motivated to produce profits for shareholders. Municipal utilities are permitted to set rates which cover both capital and operating expenses and also fund utility reserve accounts, fund in-lieu-of-tax payments to local governments, fund other worthy public projects and, within reasonable limits, make a rate of return on its investment. In addition, the municipal utility has access to tax-exempt financing for many capital expenditures. These key components provide the City with significant advantages regarding retail electricity rates as compared to remaining a full requirements customer of SDG&E.

Another major advantage with this option would be local authority and control. For instance, the future potential City of Chula Vista Electric Utility Department could make resource decisions, develop maintenance practices, develop capital improvement programs, and make other decisions relating to the operation of the utility for the sole benefit of City residents and businesses. For instance, the City could elect to purchase electricity from more environmentally benign resources in comparison to SDG&E's resource mix. The City Council would be the only entity to set electric rates. Such rates would be designed to meet any unique circumstances existing within the City's service territory. Currently, these decisions are being made by SDG&E (for the benefit of its shareholders) under the regulation of the CPUC and the FERC. Municipal utilities are not, for the most part, subject to CPUC or FERC regulation.<sup>12</sup> Rather, they are, for the most part, subject to self-regulation and control by the City Council or a municipal utility board or commission.

An important facet of local control which should not be overlooked is the ability of the Chula Vista City Council to fashion programs to utilize public goods charges (discussed in Section IV.F.3.d(1)) of the Report at 119-20 and in Appendix B, Section III.C.1.a at 16-17). Such programs must meet the requirements of state law, but can be designed to meet the unique requirements of Chula Vista customers and provide direct benefits to Chula Vista residents and businesses.

Public Utilities Code 385 authorizes and requires local publicly owned electric utilities to collect, through rates for local distribution service, revenue allocated to public benefits programs. The public benefits charges are to be not less than the lowest expenditure level of the three largest IOUs on a percent of revenue basis for year ending December 21, 1994. Public benefits related charges are currently a minimum of 2.85 percent of the publicly owned electric utility's revenue requirement.

Public benefit programs referred to include the following:

- i. Cost-effective demand-side management services to promote energy efficiency and energy conservation;

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<sup>12</sup> See discussion in Appendix B, Section I.C at 15-27.

## VI. MEU STRUCTURAL OPTIONS – OVERVIEW AND EVALUATION MUNICIPAL DISTRIBUTION UTILITY

- ii. New investment in renewable energy resources and technologies (subject to applicable statutes);
- iii. Research, development and demonstration programs for public interest to advance science and technology that is not adequately provided by competitive and regulated markets; and
- iv. Service for low-income electricity customers, including, but not limited to, energy efficiency services, education, weatherization, and rate discounts.

Revenue associated with this charge would be available to the City to allocate to various activities identified above.

Finally, the City could provide economic incentives for specific economic development areas within the City, and design rates to match those incentives.

### 5. Risks

One obvious and large risk inherent in this option is the amount of resistance that SDG&E would exert against the City moving forward with a public power entity. Ideally, if the City decided that it wanted to proceed with the implementation of a City Electric Utility Department, the City would be able to reach a negotiated settlement with SDG&E for the acquisition of its distribution assets. However, it is more likely that SDG&E would resist the acquisition of its distribution facilities.

In considering the MDU option, the City should not underestimate the potential strong opposition SDG&E will wage against the taking of its distribution assets or infringement on its customer base. The City should anticipate that SDG&E will use every legal and political tool available to frustrate, defeat or delay the implementation of the City's MDU option. The Eminent Domain Law<sup>13</sup> gives the property owner several opportunities to defeat the acquisition, beginning with the contest of the Resolution of Necessity. SDG&E can also delay the implementation process by contesting the terms and conditions of the interconnection before the FERC.<sup>14</sup> At the bottom line, SDG&E's political and legal resistance to selling its distribution assets may substantially increase the start-up costs associated with the creation of a new utility.

It is worth noting that SDG&E recently funded a citizen's initiative in San Marcos in opposition to the City Council's efforts to implement a Greenfield project to serve newly developed areas within the City.<sup>15</sup>

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<sup>13</sup> See discussion in Appendix B, Section II.A at 28-30.

<sup>14</sup> See discussion in Appendix B, Section II.C.3 at 33-35.

<sup>15</sup> The San Diego Union Tribune, August 1, 2003. According to San Marcos Councilman Lee Thibadeau: "SDG&E is doing everything it can to interfere with the city's right to establish our own utility and save our residents millions of dollars."

## VI. MEU STRUCTURAL OPTIONS – OVERVIEW AND EVALUATION MUNICIPAL DISTRIBUTION UTILITY

Another risk may involve issues surrounding the separation or “islanding” from other parts of the SDG&E system. If the City and SDG&E cannot agree on the terms and conditions of the interconnection, the City will be required to file an application for interconnection with the FERC. The FERC will establish the terms and conditions of the interconnection, including any necessary reconfiguration of the SDG&E distribution system to allow SDG&E to continue to serve those customers located outside of the City’s service territory. The FERC will assign the costs of the interconnection to the City. There would also likely be certain physical distribution asset separation problems where portions of SDG&E’s distribution lines cross other jurisdictional boundaries. This may require the construction of additional distribution substations, installation of net metering technologies, or other local distribution design reconfigurations resulting in the award of severance costs to SDG&E as part of the condemnation process. The net effect could result in increased costs of acquiring SDG&E’s distribution assets and establishing the City’s distribution system.

Operational risks must also be considered, as the City would be undertaking electric distribution operations that require skill sets and personnel not currently in place at the City. Operations and maintenance of high voltage electrical systems require skilled and experienced personnel with the ability to safely and reliably operate the system.

To provide a cost benefit over the current SDG&E service, the City would need to be able to acquire the distribution system, provide or obtain energy and related services, perform operation and maintenance services, billing, settlements, and collections, and perform long-term planning, all at a cost of less than the current provider. Based upon the financial pro forma performed by the MEU Study Team, the City can meet this challenge through the formation and operation of a full service MDU.

### **6. Legal/Regulatory**

#### **a. Formation and Implementation Process**

Cal. Const. Art. XI, §9 provides specific authority for municipal corporations to provide utility services both within and without of their boundaries “. . . except within another municipal corporation which furnishes the same service and does not consent.” Cal. Pub. Util. Code § 10002 provides that a municipal corporation may acquire, construct, own, operate, or lease any public utility. A Public Utility, in this context, is defined as the supply of a municipal corporation alone or together with its inhabitants, or any portion thereof, with water, light, heat, power, sewage collection, treatment, or disposal for sanitary or drainage purposes, transportation of persons or property, means of communication, or means of promoting the public convenience. *See* Cal. Pub. Util. Code § 10001.

Publicly owned municipal utilities (the various forms of which are set forth and described at Cal. Pub. Util. Code § 9604(d)) are not regulated by the Public Utilities Commission or any other supervising agency, in the absence of a legislative

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grant of authority (Cal. Const., art XII, § 3; *see also, County of Inyo v. Public Utilities Commission* (1980) 26 Cal. 3d 154.

No formation or implementation process is specified by state law for the creation of such a utility.

As discussed in Section I above at 1, the City of Chula Vista has already taken the initial steps in the formation of an MEU with the adoption, on June 5, 2001, of Ordinance No. 2835, establishing the City as a municipal utility.

### **b. Exercise of the Power of Eminent Domain**

In California, a public entity, such as Chula Vista, may acquire property for public use, including public utility facilities and franchises, using the process of eminent domain.<sup>16</sup> The procedure which a municipality or other entity (e.g. Municipal Utility District) must follow in acquiring public utility facilities or franchises is discussed in detail in Section IV.F.4.a of the Report at 123-24 and in Appendix B, Section II.A at 28-32. The MEU Study Team has also provided an analysis of the standards for determining “just compensation” in eminent domain proceedings. See Appendix B, Section II.B at 30-32.

## **7. Financing Options**

The City would have certain financing advantages in comparison to SDG&E due to its lower cost of capital arising from access to low cost debt and exemption from federal and state income taxes. Tax-exempt financing is not applicable to the acquisition of existing distribution assets and was not used in the analysis. Tax-exempt financing was only assumed to be used for all new distribution and generation facility development.

In Appendix C, Section IV.A, at 126-27, the MEU Study Team has provided an overview and comparative analysis of each type of financing vehicle that is available to the City.

## **8. Implementation Schedule and Timelines**

The implementation of an MDU option will be complicated by the eminent domain process assuming that the City is unable to reach agreement with SDG&E after making an offer for the purchase of the electric distribution system. To develop a reliable offer, the City must complete the study and planning process and adopt a Resolution of Necessity. On a most optimistic basis, the MEU Study Team estimates that an MDU could be established in a three and one-half year time frame. More realistically, the MEU Study Team would suggest allowing a five to six year (or more)

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<sup>16</sup> See Cal. Civ. Proc. Code §§ 1240.010 and 1240.110.

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lead time for the formation of the MDU. During this period, the City could implement the CCA/Greenfield options, develop an MEU infrastructure, and gain utility operating experience before undertaking the task of acquiring or condemning SDG&E's electric distribution system.

### **a. Implementation Schedule**

In the event that Chula Vista elects to form an MDU, the MEU Study Team has identified the following major and critical steps, beginning with a focused MDU Feasibility and Implementation Plan, which will be necessary for the City to complete before commencing the operation of the City's electric distribution system:

#### **(1) Focused MDU Feasibility and Implementation Plan Tasks**

- (1.1) Distribution System Survey and Valuation: (1 mo.)
  - 1.1.1 Detail the distribution system configuration, inventory equipment and facilities; document the percent condition
  - 1.1.2 Perform a system valuation to determine just compensation for the negotiated purchase or condemnation of the existing distribution system
- (1.2) Severance Plan and Cost Study: (3 mo.)
  - 1.2.1 Perform an engineering evaluation of the distribution system within and adjacent to the City's boundaries
  - 1.2.2 Document the location and configuration of substations and interconnections required to isolate and interconnect the City electric system and ensure SDG&E can provide service to its remaining customers
  - 1.2.3 Prepare plans, specifications, drawings, material lists, cost and construction time estimates
  - 1.2.4 Identify other private properties that must be purchased or condemned and estimate just compensation and time estimates
- (1.3) Energy Resource Plan: (3 mo.)
  - 1.3.1 Finalize generation and contract supply strategy, engage developers in negotiations
    - 1.3.1.1 Negotiate placement of generation facilities within City boundaries
    - 1.3.1.2 Negotiate a percentage of plant ownership and/or entitlement to generation plant output
    - 1.3.1.3 Identify a short list of wholesale energy providers; refine supply pricing, terms and conditions of supply
- (1.4) Human Resources Plan: (3 mo.)

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- 1.4.1 Identify any areas of overlap with existing City organizational structures and ways to leverage existing staff capabilities
- 1.4.2 Re-evaluate human resource requirements (Section IV.F at 106-07) to eliminate overlaps in staffing
- 1.4.3 Develop detailed job descriptions for each remaining human resource requirement
- 1.4.4 Perform an analysis of the regional labor base to determine availability of qualified candidates for key discipline areas, survey the relevant job market to fulfill plans to staff these positions and provide time estimates

### (1.5) Facilities Plan: (3 mo.)

- 1.5.1 Identify facility requirements
  - 1.5.1.1 Customer and Energy Services: (call center, staff offices, billing system, vehicles and equipment)
  - 1.5.1.2 Distribution Engineering and Operations: (offices, communication and control equipment, garage facilities, service vehicles, yard, security)
  - 1.5.1.3 Power Operations: (staff offices, systems and equipment)
  - 1.5.1.4 Detail availability, location and cost to build, buy, lease or otherwise acquire the needed facilities

### (1.6) Pro Forma Update: (1 mo.)

- 1.6.1 Update cost estimates with results of the distribution system survey, severance, energy resource, human resources and facilities plans described in 1.1 to 1.5
- 1.6.1 Prepare request to SDG&E to obtain detailed customer load data
- 1.6.2 Update and refine load forecast based on planned development
- 1.6.3 Incorporate the impacts of any new regulations, cost assumptions or City objectives

### (1.7) Finance Plan: (1 mo.)

- 1.7.1 Work with financial planners and bond counsel to develop revenue bonding and other alternatives for financing depending upon categories and values of assets to be financed

### (1.8) Governance Plan: (2 mo.)

- 1.8.1 Propose governance structures for the new municipal utility
- 1.8.2 Obtain consensus among City leadership and establish plans for reporting, oversight and financial management of the municipal utility

### (1.9) Implementation Plan: ( 1 mo.)

- 1.9.1 Incorporate all of the above into an implementation plan

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1.9.1.1 Structures, costs, timelines, updated financial prospectus

1.9.1.2 Achieve City leadership’s approval and move to Implementation Phase

### **(2) Implementation Plan Tasks**

- (2.1) Establish public interest and necessity and demonstrate greatest public good, least private injury (1 mo.)
- (2.2) Ordinance No. 2835 has provided local authority establishing a public utility – further action by City Council to authorize negotiations with SDG&E as described in Section 2.3 below (1 mo.)
- (2.3) Make an offer and attempt to negotiate the purchase of SDG&E’s distribution system (1 mo.)
- (2.4) Provide an opportunity for SDG&E to appear and be heard and argue public interest and necessity (30 days required - 1 mo.)
- (2.5) Adopt Resolution of Necessity to condemn the property (1 mo.)  
(Resolution of Necessity creates a rebuttable presumption that the public interest and necessity have been established<sup>17</sup>)
- (2.6) Final Offer: 30 days prior to condemnation trial the City must make another attempt to negotiate the purchase of the property (1 mo.)
- (2.7) Judicial Review:<sup>18</sup>
  - 2.7.1 SDG&E is likely to seek judicial review of the validity of the City’s Resolution of Necessity (see 2.5) before or during the power of eminent domain proceeding<sup>19</sup> (3 mo.)
- (2.8) File Complaint in Superior Court invoking the power of eminent domain and initiating condemnation proceedings (6 mo. to 2 years)
  - 2.8.1 Obtain any final information needed to confirm and support any critical elements of the Implementation Plan
    - 2.8.1.1 The City can secure either the written consent of the SDG&E or an order from the Superior court to enter the property to make photographs, studies, surveys,

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<sup>17</sup> Cal Civ. Proc. Code § 1245.250.

<sup>18</sup> Cal Civ. Proc. Code § 1245.255.

<sup>19</sup> Cal Civ. Proc. Code §§ 1250.350 and 1250.370.



## VI. MEU STRUCTURAL OPTIONS – OVERVIEW AND EVALUATION MUNICIPAL DISTRIBUTION UTILITY

examinations, and appraisals or engage in similar activities related to acquisition or use of the property<sup>20</sup>

- 2.8.1.2 If the City's Resolution of Necessity is accepted and the City's right to affect a taking of SDG&E's property and setting of compensation is approved, the City may apply ex parte to the court for an order for possession (deposit with the court the probable amount of compensation) and proceed to initiate the Implementation Plan.

### (2.9) Execute Implementation Plan: (1 year)

- 2.9.1 Negotiate the Date of Possession based upon the scheduled completion of the Following:
- Governance Plan
  - Human Resources Plan
  - Facilities Plan
  - Severance Plan
  - Energy Resource Plan

### 2.9.2 Execute Energy Supply Agreements

- 2.9.2.1 Finalize arrangements with developers for generation projects
- 2.9.2.2 Prepare RFP for Power Supply Contracts, Evaluate Responses and Execute Contracts
- 2.9.2.3 Begin Scheduling power

### **b. Timelines**

Given the many variables inherent in the eminent domain proceedings and in the other regulatory proceedings related to the establishment of state imposed exit fees and non-bypassable charges, it is impossible to provide a definitive implementation schedule. The MEU Study Team estimates the following timelines for the completion of the planning elements and implementation phases in establishing an MDU:

Planning Elements: The time to complete additional planning, consisting of the individual elements itemized above, performed in sequence are estimated to take twenty months. However, overlaps and concurrent work projects might reduce this estimate to one year. The lead time to implement generation projects, on which the MDU Generation Strategy option and its benefits are based, is estimated between one and one-half to three years, although this might be initiated prior to completing all of the planning elements.

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Civ. Proc. §§ 1245.010, 1245.020, 1245.030.

## VI. MEU STRUCTURAL OPTIONS – OVERVIEW AND EVALUATION MUNICIPAL DISTRIBUTION UTILITY

Implementation Phase: It is estimated that the process leading up to a condemnation trial will take approximately six months for Implementation Tasks 2.1 through 2.7. The court hearings are estimated to take between six months and two years. An order for possession might be obtained prior to resolution and setting of just compensation. It is estimated that the City can establish its right to take the SDG&E assets by obtaining the judicial approval of the Resolution of Necessity within ten months. It is further estimated that the implementation Plan can be fully executed in from one year to 18 months. Hence, the most optimistic time projection to implement the MDU is three and one-half years.

The MEU Study Team believes the estimated two year time required to implement a generation project will run concurrently with the additional planning activities and the condemnation process. Accordingly, the 3.5 year time estimate would not change for implementation of the MDU structure option with a Contract Supply Strategy. However, as discussed above, the MEU Study Team does not recommend implementing the MDU option with a Contracts Supply Strategy.

Based on the analysis contained herein, the City could elect to implement an MDU employing a Generation Supply Strategy as soon as it could obtain entitlement to generation output from a local, modern power plant. A phased approach, as described above, would allow the City to develop experience in the power procurement and delivery business.

If the City elects to implement the MDU option in the 2010 timeframe, after the establishment of the Combined CCA/Greenfield option, as recommended by the MEU Study Team, the City would commence the MDU Planning and Implementation Elements discussed above in mid-2008.<sup>21</sup>

In considering the timelines necessary to implement an MDU system, the City should be cognizant of and prepared for strong legal and political opposition from SDG&E. Such opposition could substantially delay the completion of the acquisition process and increase the start-up costs for the MDU option.

### **9. Recommendation**

Based upon the positive results of the pro forma financial studies and the other major benefits, which will accrue from the implementation of the MDU (with the Generation Supply Strategy) option, the MEU Study Team believes that it is feasible, from both an economic and operational standpoint, for the City to form and operate an MDU by acquiring the distribution assets of SDG&E. In coming to this conclusion, the MEU Study Team recognizes that, because of the substantial capital investment required to acquire the distribution system, generation facilities and to defray the start-up expenses

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<sup>21</sup> It should be noted that, in the Gantt Chart located in Section VIII.B below at 59 and in Appendix C, Section V.C at 132, the implementation schedule used for comparing the MEU options reviewed herein begins in 2004 for all options.

## VI. MEU STRUCTURAL OPTIONS – OVERVIEW AND EVALUATION MUNICIPAL DISTRIBUTION UTILITY

for an MDU, the potential NPV of benefits to the City is less favorable than the CCA/Greenfield option with a Generation Strategy. At the same time, the MEU Study Team is of the opinion that, in the long run, the ownership of the electric distribution system would allow the City to serve all electric customers within the City at rates substantially below the current and projected rates of SDG&E and permit the city to build asset value in the distribution system. The MEU Study Team has also given substantial weight to the non-financial benefits to be realized by public ownership of the distribution system, including local control of rates and service, discretion in the application of savings or benefits, and independence from SDG&E and the owner/operators of the transmission grid.

Given the additional planning and study requirements needed to implement the MDU option, together with the procedural steps which must be followed under the Eminent Domain Law, the MEU Study Team recommends that the City defer implementation of the MDU option until the 2008-10 time frame and re-evaluate the option based on circumstances existing at that time. Assuming that the City proceeds to develop the CCA and Greenfield options in the meantime, the City will have an MEU infrastructure, customer base, generation facilities and several years of operating experience before needing to make the critical decision of potentially acquiring the distribution system of SDG&E. In the event that CCA appears to be uneconomical once the CPUC has issued its final rulemaking decisions, the MEU Study Team would recommend that the City accelerate its consideration of the MDU option.

## VI. MEU STRUCTURAL OPTIONS – OVERVIEW AND EVALUATION JOINT POWERS AGENCY/MUNICIPAL UTILITY DISTRICT

### **E. Joint Powers Agency/Municipal Utility District**

As discussed in the Report, Section III.B.5 at 26 and Section IV.G at 135, the MEU Study Team identified two long range options which are open to the City once it establishes an MDU. These options are participating in a Joint Action Agency (JPA) or forming a Municipal Utility District (MUD). As explained in the body of this Report, both the JPA and MUD options would involve making complex arrangements and entering into contractual agreements with other publicly-owned electric systems and/or local governments.

While both the JPA and MUD options provide a vehicle for spreading risk and expenses and allowing the City's MEU to take advantage of the economies of scale, it is the opinion of the MEU Study Team that neither the JPA nor MUD option is suitable as a vehicle for the initial formation of an MEU by the City.

Once the City forms its MEU and begins operations under any one of the options analyzed and recommended herein, the City should consider participation in an existing JPA or the formation of an MUD.

The legal authority and the procedures required to participate in or form a JPA or MDU are set forth in Section IV.G of the body of the Report at 135-39.

**VII. NATURAL GAS**

As explained in Section IV.H of the Report at 140-54, the MEU Study Team performed an analysis of the feasibility of owning and operating the gas distribution facilities located within the City. The gas distribution system in Chula Vista is currently owned and operated by SDG&E, a wholesale customer and affiliate of SoCal Gas.

The study first focused on the economics of the gas distribution business since SDG&E's gas procurement charge for core customers is competitive with the market price of gas available to SDG&E at the California border. The MEU Study Team found that (1) SDG&E does not own substantial amounts of interstate pipeline capacity, and (2) that SDG&E's gas procurement contracts are based on rates that are "at or below" market prices and that, even with projected escalation in gas prices, it is unlikely that SDG&E's gas procurement contracts will be "above market" during the 18-year period of the study. Under these circumstances, it was concluded that Chula Vista could not compete with SDG&E by entering into the gas distribution business using SDG&E's gas distribution system for delivery of gas to customers within the City.

The MEU Study Team then performed an analysis to determine whether Chula Vista could provide any benefits or achieve economic feasibility by acquiring, owning and operating the gas distribution system within the City's boundaries. Since the MEU Study Team had concluded that the City could not procure gas at wholesale for prices that were competitive with SDG&E, it was necessary to determine whether the City could provide gas transportation and distribution (T&D) services to customers at a lower cost than the customers currently pay to SDG&E for these services. To perform this analysis, the MEU Study Team provided an estimate, using conservative assumptions, of Chula Vista's estimated costs for facility acquisition, operating costs, and transmission costs which would have to be paid to both SoCal Gas and SDG&E to get wholesale gas to the City.

Once the MEU Study Team projected all operating and gas procurement costs, these costs were compared to comparable costs of continuing to buy retail gas from SDG&E to determine whether Chula Vista could provide gas service to its customers at rates lower than SDG&E. The comparative cost analysis for both gas distribution service and for a full service gas utility (including acquisition, ownership and operation of the gas distribution system) were negative. Under the conservative assumptions used by the MEU Study Team, the study shows that, over the 18-year study period (2006 through 2023), the NPV of the revenues which would be lost by establishing a municipal gas utility in Chula Vista would be approximately \$24 million.

As this feasibility analysis reflects, on September 17, 2003, SDG&E filed an application for significant increases in its natural gas rates as part of its Biennial Cost Allocation Proceedings (BCAP). If approved, SDG&E's new gas rates would become effective on January 1, 2005. In the event that SDG&E succeeds in its proposal to

## VII. NATURAL GAS

increase its gas rates, the MEU Study Team recommends that the City should reexamine the feasibility of providing gas distribution services.

**VIII. CONCLUSIONS AND RECOMMENDATIONS**

**A. Discussion and Comparison of Recommended Options**

Based upon the results of this feasibility analysis, the MEU Study Team has recommended that the City implement its Energy Strategy through the implementation of the following MEU options or a combination thereof:

**1. Community Choice Aggregation Program**

**a. Analysis**

Under a CCA program based on a Contracts Supply Strategy, cost savings or benefits are projected to occur in the years 2006-10. Projected SDG&E rate reductions in 2011 resulting from the expiration of DWR power purchase contracts eliminate the savings or benefits in the years 2011 through 2014. At that time, annual increases in SDG&E's rates are projected to provide persistent savings or benefits to the City through the study period. Savings begin at \$6.3 million/year in 2006 and increase to \$11 million/year in 2023. The City could implement the CCA program based on a Contracts Supply Strategy without substantial capital costs. The first year implementation costs to get this program in operation are estimated at \$225,000.

A CCA program based on a Generation Supply Strategy promises to optimize the City's revenues and savings to its customers. If Chula Vista elects to secure 130 MW of generation, the MEU Study Team projects savings to begin at \$13.3 million/year in 2006 and grow to \$21.3 million/year in 2023. Here again, savings or benefits will be reduced significantly in the years 2011-2014 due to the expiration of SDG&E's DWR contracts, and savings or benefits would increase as SDG&E's wholesale rates are increased. Under this option, the City would be required to make a substantial capital investment in generation facilities to provide 130 MW of internally-generated electric power. The initial investment in generation is estimated at \$78 million.

The major benefit available under the CCA program is that, under this option, the City could begin purchasing electric energy and supplying it to its retail customers without the need to purchase the SDG&E electric distribution system. It would also provide a generation portfolio and the infrastructure and experience necessary if the City also elects to establish a Greenfield Project or form an MDU and acquire and operate the electric distribution system within the City.

**b. Recommendation**

It is the recommendation of the MEU Study Team that the City immediately implement the Tasks identified in the body of the Report to implement a CCA program. While the actual implementation of a CCA program cannot be completed until the CPUC issues its final rules and regulations, the MEU Study Team believes that the City could implement a CCA program by mid-2005 or 2006.

## VIII. CONCLUSIONS AND RECOMMENDATIONS

Of the two CCA options analyzed, implementation of a CCA program with a Generation Supply Strategy, as opposed to the Contract Supply Strategy, optimizes the benefits and savings to the City

### **2. Greenfield Development**

#### **a. Analysis**

Based upon the economic analyses, the MEU Study Team concluded that a Greenfield utility, which commences service in 2006, would lose money until 2012. Beginning in 2012, the MEU Study Team projected persistent savings or benefits through the end of the study period (2023) due to the addition of a larger number of electricity users and the addition of large commercial and industrial loads. Over the study period (2006-23), savings or benefits are projected to amount to \$21 million. The implementation of a Greenfield option would require a capital investment of approximately \$13.8 million to provide the distribution system necessary to serve developing areas.

The MEU Study Team projected the cost of taking wholesale distribution service under SDG&E's WDAT and developed projections for the initial cost of construction, the distribution infrastructure necessary to serve the Greenfield areas. The MEU Study Team then developed a projected electric supply portfolio, including long and short-term power purchase contracts and renewable energy contracts. The study showed that a stand-alone Greenfield utility was not of sufficient size to support the development of an internal generation project by the City. Therefore, the projected power supply for the Greenfield utility is 100% contract based.

In addition to the economic benefits to be derived over the study period, the development and operation of Greenfield projects also produces other non-financial benefits to the City. Importantly, the operation of the City's Greenfield projects will put the City into the utility business, provide City personnel with experience in operating an electric utility, and provide the City with the beginnings of an electric distribution infrastructure. Moreover, as discussed below, the Greenfield option can be readily combined with a CCA program to optimize savings to customers within the City and is easily absorbed as part of a municipal distribution system if the City later decides to form an MDU and acquire and operate the electric distribution facilities within the City boundaries.

#### **b. Recommendation**

The MEU Study Team has concluded that the development of Greenfield Projects within the City is both economically feasible and desirable and recommends that the City immediately implement plans to develop Greenfield projects in the Mid-Bayfront, Eastlake/Otay Ranch Area and Sunbow planning areas for operations in 2006.



## VIII. CONCLUSIONS AND RECOMMENDATIONS

### 3. Combined CCA and Greenfield Development

#### a. Analysis

The detailed economic and financial analysis performed by the MEU Study Team demonstrates that the City can obtain the greatest potential benefit in the short term by forming a CCA and simultaneously pursuing Greenfield project opportunities. Under the most beneficial option, the City would build or acquire equity in a generation project (130 MW), preferably within the City, to supply the combined CCA/Greenfield loads. The CCA program would give the City the operational scale required to effectively source electricity for the CCA and Greenfield customers and successfully compete with the electric supply portfolio of SDG&E.

In implementing the combination of CCA and Greenfield projects, the City can capture the benefits of CCA in areas where there is presently an SDG&E distribution infrastructure and realize commensurate savings on the electric energy component for Greenfield areas, thus significantly increasing the cost effectiveness of the Greenfield projects.

Based on the financial pro forma performed by the MEU Study Team, the combined CCA/Greenfield utility option, using City-owned generation, would produce annual savings or benefits amounting to \$14.9 million in 2006 and increasing to \$31.7 million in 2023 (again with significant reductions in savings or benefits in the 2011-2014 time frame). Over the study period savings or benefits are projected to amount to \$122 million.

To implement a combined CCA/Greenfield utility option, the City would be required to invest some \$78 million in a new generation facility and \$13.8 million for the new distribution facilities in the Greenfield development areas.

#### b. Recommendation

To optimize savings and benefits to the City and its customers, the MEU Study Team strongly recommends that the City implement the combined CCA/Greenfield utility option in the immediate future. The MEU Study Team estimates that a CCA program could be operational by mid-2005 (assuming that the CPUC issues final rules and regulations by mid-2004). With respect to Greenfield development, the MEU Study Team estimates that the initial Greenfield project could be implemented in a 15 to 20 month time frame depending upon the construction schedule and building occupancy within the designated Greenfield areas. Thus, a combined CCA/Greenfield operation could be implemented at least by 2006.

## VIII. CONCLUSIONS AND RECOMMENDATIONS

### 4. Municipal Distribution Utility

#### a. Analysis

Based upon the pro forma financial analysis performed by the MEU Study Team, a City-owned MDU would, under the MDU Generation Supply Strategy (i.e., with at least 130 MW of in-City generation), realize \$12.3 million/year in savings in 2006 and increasing to \$28.7 million in 2023. Total savings through 2023 would amount to \$109 million. Savings would be substantially reduced in the 2011-2014 timeframe due to the expiration of SDG&E's obligations under its contracts with DWR.

Under an MDU Contracts Supply Strategy (i.e., under which the Chula Vista MDU purchases all electric power requirements in the market and pays related transmission costs), the MDU would suffer losses in the first eleven years and realize only modest savings in the period from 2017 through 2023. Based upon the pro forma results, the MEU Study Team has concluded that an MDU that relies exclusively on market purchases of wholesale electricity to serve the entire load requirements of its customers would not be a cost-effective option for the City.

The MDU option would require a substantial investment in distribution infrastructure to distribute electric power to the customers of the City's MDU, including: distribution substations, primary distribution transformers, primary distribution wires and poles, final line transformers, secondary distribution feeders, and meters. It was assumed that the City would acquire these facilities from SDG&E by negotiated purchase or through the exercise of the power of eminent domain.

For purposes of this feasibility analysis, the MEU Study Team relied on information provided by SDG&E, the City's tax records, the CPUC, the Federal Energy Regulatory Commission (FERC) and upon industry standard practices to estimate the value of the SDG&E distribution system at \$170 million. Using this acquisition cost figure, the MEU Study Team estimated the combined system acquisition and start-up costs (including distribution facilities, customer service call center, billing equipment and service vehicles) at \$185 million.

In addition to the capital costs necessary to acquire the SDG&E distribution system and establish necessary interconnections and bulk power supply costs, the MEU Study Team estimated the distribution operations and maintenance costs and has taken into consideration the required payment for "exit fees" and other non-bypassable charges mandated by legislation and related CPUC orders and any applicable Federal stranded costs which may be required under FERC rules or regulations. The MEU Study Team has also factored in the loss of franchise and/or tax revenues.

In forming and implementing an MDU, the City can expect enormous and continued opposition by SDG&E, both legally and politically. Depending upon the strength of the opposition by SDG&E, the litigation costs could substantially increase the implementation costs and substantial delays could result.

## VIII. CONCLUSIONS AND RECOMMENDATIONS

### **b. Recommendation**

The MEU Study Team has concluded that, in the long term, the formation of an MDU, which obtains generation from City-owned facilities and owns and operates a utility distribution system is a feasible option notwithstanding the substantial capital investment required and higher risks and potential litigation costs involved. In making this recommendation, the MEU Study Team notes that the NVP of savings or benefits over the study period is less for the MDU option than for the Combined CCA/Greenfield option (with a Generation Supply Strategy). This is primarily due, of course, to the capital costs necessary to acquire the SDG&E distribution system. At the same time, the MEU Study Team believes that the long-term benefits resulting from the City's ownership of the electric distribution system (*i.e.*, local control, asset appreciation, and independence from SDG&E and the owner/operators of the transmission system) may justify the City's decision to establish and operate an MEU.

For the reasons explained in the body of this Report, the MEU Study Team recommends that the City first implement the CCA/Greenfield options and defer a decision on the potential implementation of the MDU structure until the 2008-10 time frame.

If the MDU continues to be the more beneficial option in 2008-2010, as this analysis predicts, the City would, at that time, have four years of power supply operations (CCA), distribution system operation and maintenance experience (for the Greenfield portion of the City) to assist it in making a decision on whether to form and operate a full service MDU.

### **5. Joint Powers Agency and Municipal Utility District Options**

#### **a. Analysis**

If the City elects to establish a full service MDU and acquire the electric distribution facilities of SDG&E, two other long-range options will be available to the City's MDU. The City, through its MDU, may be able to participate in an existing Joint Powers Agency (JPA), or form, in partnership with another community, unincorporated territory, or public utility entity, a Municipal Utility District (MUD).

Both of these options provide the City with alternatives which would spread risk, expand the City's options for generation and transmission resources and allow the City to more effectively achieve the economies of larger scale projects and operations. For the reasons explained in this feasibility report, the MEU Study Team has concluded that neither the JPA nor the MUD structure is suitable for use as a vehicle for establishing an MEU. Both options involve the development of arrangements, agreements and infrastructure with other publicly-owned utilities or local governments. The development of these arrangements would further complicate and delay the

## VIII. CONCLUSIONS AND RECOMMENDATIONS

implementation process and would require the City to relinquish local control in the development of its MEU structure.

### **b. Recommendation**

At such time as the City establishes an operating MEU, it is recommended that it reevaluate the feasibility of participating in a JPA or forming an MUD.

### **B. Roll Out Strategy**

As part of this feasibility analysis, the MEU Study Team has provided a detailed listing of the major and critical steps necessary to implement each of the recommended MEU options. The MEU Study Team has also provided a Gantt Chart showing the time-line requirements for each major step or task necessary from the initiation of the process to operations. *See* Gantt Charts below and in Appendix C, Section V at 130-32.

#### **1. CCA – Implementation Schedule**

The MEU Study Team recommends a two-track approach to evaluate and implement a CCA project. Within Track One the following tasks are required immediately: (1) conduct an orientation session for Elected Officials and Staff on this option including a review of this feasibility analysis; (2) continue active participation in the CPUC's proceedings and workshops for the development of costs, credit rules and regulations; (3) update the feasibility analysis with information from the CPUC proceedings; and (4) develop the CCA Implementation Plan, adopt the Implementation Plan at a duly noticed public hearing, pass an Ordinance to implement CCA per the Implementation Plan and file the Implementation Plan with the CPUC by July 2004<sup>22</sup>. Under Track One, the MEU Study Team anticipates that the CPUC approval of the City's Implementation Plan would take between four to seven months.

Assuming CPUC approval of the City's CCA Implementation Plan by January 2005, the following tasks would be initiated simultaneously within Track-Two: (a) the City would execute a Service Agreement with SDG&E; (b) complete development of CCA metering facilities; and (c) complete customer notification regarding opt-out provisions. Between July 2005 and January 2006 the following iterative and on-going activities should be conducted by the City: (1) activate Energy Supply Resource Plan; (2) address Load Forecast and Optimize Scheduling; (3) manage supply portfolio and risk management (4) process financial settlements; and (5) produce operating statements and reports. Under this schedule and based on these assumptions, the MEU Study Team anticipates that a CCA project could be operational by early 2006. Please see Section IV.C.6 at 58-60 for more detail on this Implementation Schedule.

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<sup>22</sup> Although the CPUC has not approved rules for the implementation of the CCA program, the draft rules and CPUC precedent indicate that parties have submitted applications for the CCA program.

## VIII. CONCLUSIONS AND RECOMMENDATIONS

### *CCA Implementation Schedule*

		2003												2004												2005												
Task		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1.1	Initiation																																					
1.2	Base Case Studies																																					
1.3	CPUC Proceedings A																																					
1.4	Track-1 Report																																					
1.5	Implementation Plan																																					
1.6	CPUC Proceedings B																																					
2.1.1	Register CCA																																					
2.1.2	Service Agreement																																					
2.1.3	CCA Metering																																					
2.1.4	Customer Notification																																					
2.1.5	Notify IOU																																					
2.2.1	Activate Energy Supply Resource Plan																																					
2.2.2	Load Forecast/Schedule																																					
2.2.3	Portfolio Management																																					
2.2.4	Financial Settlements																																					
2.2.5	Operating Reports																																					

## VIII. CONCLUSIONS AND RECOMMENDATIONS

### 2. Greenfield – Implementation Schedule

Recognizing that the City has previously passed an ordinance to form a municipal utility and, working back from the date that occupancy of the Greenfield areas would be initiated (as early as July 2005), the MEU Study Team recommends that the following steps be taken by the City to implement the Greenfield option: (1) consult with electric distribution design firms and developers to design and specify system requirements for the Greenfield Project -- initiate in January 2004 and complete by April 2004; (2) following the development of the design and system requirements, the City would need to determine the interconnection requirements, which includes an assessment of technical requirements and costs to achieve interconnection of the distribution system -- initiate in April 2004 and complete no later than mid-November 2004; (3) evaluate and assess projected loads, costs and benefits -- initiate in November 2004 and complete by mid-December 2004; (4) based upon the final evaluation of the load studies and forecasts, the City would need to tailor and implement a resource plan and schedule power and update power delivery schedules; (5) the City would initiate a human resource plan, in December 2004 and complete staffing by February 2005; (6) developers would complete infrastructure construction (trenches, conduits, vaults and transformer pads) in the March to April 2005 time frame; (7) high voltage contractors would install conductors, transformers, service drops and metering in April 2005; (8) contractors would install streetlights, traffic signals and landscape irrigation facilities (peripheral equipment) by mid-May 2005; and (9) utility service could be provided between mid-May and mid-June 2005 or be scheduled to coincide with an occupancy. Please see Section IV.D.6 at 77-79 for more detail on this Implementation Schedule.

## VIII. CONCLUSIONS AND RECOMMENDATIONS

### Greenfield Implementation Schedule

#### Greenfield Utility Development

	Project Year	1												2											
Task	Project Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
1	Ordinance																								
2	System Design																								
3	Interconnection																								
4	Final Evaluation																								
5	Procure and Schedule Power																								
6	Staffing/Outsourcing																								
7	Infrastructure Construction																								
8	High-Voltage Equipment Installation																								
9	Peripheral Equipment																								
10	Initiate Operations																								

## VIII. CONCLUSIONS AND RECOMMENDATIONS

### 3. Combined CCA/Greenfield – Implementation Schedule

The implementation schedule for the CCA/Greenfield entails utilizing the major and critical steps identified in the implementation schedules for CCA and Greenfield options and combining them. The major and critical steps and timelines would remain unchanged.

### 4. MDU – Implementation Schedule

If the City elects to form an MDU, the MEU Study Team has identified the following major and critical steps: (1) During the first year after electing to pursue the MDU option, the City should complete the feasibility and implementation plan, which includes: (a) Distribution System Survey and Valuation, (b) Severance Plan and Cost Study, (c) Energy Resource Plan, (d) Human Resource Plan, (e) Facilities Plan, (f) Pro Forma Update, (g) Finance Plan, (h) Governance Plan, and (i) Implementation Plan. (2) by the end of the first year, establish public interest; (3) begin the condemnation process: (a) offer to purchase the distribution facilities of SDG&E, (b) public hearing on finding of public interest and necessity, (c) adopt Resolution of Necessity to condemn property, (d) second and final offer of purchase to be extended to SDG&E, (e) judicial review of Resolution of Necessity, (f) conduct the condemnation proceeding; and (4) execute Implementation Plan once condemnation proceedings have been completed and an Order for Possession has been entered by a court of competent jurisdiction. If the City elects to implement the MDU option in the 2010 time frame, after the establishment of the Combined CCA/Greenfield option, as recommended by the MEU Study Team, the City would commence the MDU Planning and Implementation elements in mid-2008. Please see Section IV.F.6 at 127-131 for more detail on this Implementation Schedule.



## VIII. CONCLUSIONS AND RECOMMENDATIONS

### MDU Implementation Schedule

		2004												2005												2006												2007																			
Task		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun														
Focused Feasibility and Implementation Plan																																																									
1.1	Valuation																																																								
1.2	Severance Plan																																																								
1.3	Energy Resource Plan																																																								
1.4	Human Resources Plan																																																								
1.5	Facilities Plan																																																								
1.6	Update Pro Forma																																																								
1.7	Finance Plan																																																								
1.8	Governance Plan																																																								
1.9	Implementation Plan																																																								
Implementation Tasks																																																									
2.1	Establish Public Interest																																																								
2.2	Ordinance																																																								
2.3	1st Offer to Purchase																																																								
2.4	Public Hearing																																																								
2.5	Adopt Resolution of Necessity																																																								
2.6	2nd & Final Offer to Purchase																																																								
2.7	Judicial Review (optional)																																																								
2.8	Condemnation																																																								
2.8.1.1	Data Request																																																								
2.8.1.2	Order for Possession																																																								
2.9	Execute Implementation Plan																																																								